



U.S. Department  
of Transportation

**Federal Aviation  
Administration**

# *7210.56*

## *Air Traffic Quality Assurance*

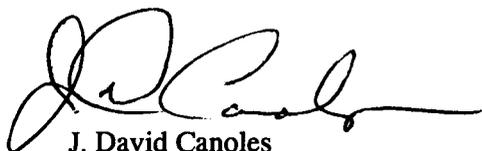
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10/30/97

## FOREWORD

This order is the culmination of a long and thoughtful process involving the active participation of nearly all elements of air traffic, including headquarters, regional offices, facility managers, Air Traffic Supervisors Committee (SUPCOM), National Air Traffic Controllers Association (NATCA), and National Association of Air Traffic Specialists (NAATS). This order is derived from a mutual goal of addressing quality assurance efforts at the national, regional, facility, and individual levels. It provides specific guidance on reporting, investigating, and resolving various types of incidents that impact the quality of air traffic services. This order also represents several new ways of addressing quality assurance issues in a manner designed to improve the system. This order has not eliminated nor reduced any employee's responsibilities and, in fact, in several areas it has enhanced or expanded individual roles.



J. David Canoles  
Manager, Air Traffic Evaluations and  
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## Chapter 1. GENERAL

### Section 1. GENERAL

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# Chapter 1. GENERAL

## Section 1. GENERAL

### 1-1-1. PURPOSE

This order addresses quality assurance efforts at the national, regional air traffic division, local facility, and individual employee levels. This order provides specific guidance on reporting, investigating, and resolving various types of incidents that impact the quality of air traffic services. This order is designed to work in conjunction with Federal Aviation Administration (FAA) Orders concerning facility evaluations, air traffic technical training, performance management systems, and bargaining unit contractual agreements.

### 1-1-2. DISTRIBUTION

This Order is distributed to selected offices in Washington Headquarters, Regional Offices, the Technical Center, and the Aeronautical Center. Also, copies are sent to all air traffic control facilities, all international aviation field offices, and the interested aviation public.

### 1-1-3. ACTION

Within 90 days of implementation of this order:

a. First-level supervisors shall complete a training discussion with each of their employees as provided under Chapter 3.

b. Managers shall review existing quality assurance orders and programs for compliance and, as required, shall revise existing or develop new quality assurance programs.

### 1-1-4. EFFECTIVE DATE

This Order is effective February 1, 1998.

### 1-1-5. RELATED PUBLICATIONS

The following publications are the primary references to be used in coordination with provisions of this order:

- a. FAA Order 3120.4, Air Traffic Technical Training.
- b. FAA Order 7110.10, Flight Services.
- c. FAA Order 7110.65, Air Traffic Control.
- d. FAA Order 8020.11, Aircraft Accident and Incident Notification, Investigation, and Reporting.

### 1-1-6. USE OF TERMS

*First-Level Supervisor* shall be understood to include the Air Traffic Manager (ATM) wherever the ATM also performs such duties.

*First-Level Supervisor, ATM, etc.*, shall be understood to include their official designees, except where specifically noted, for the purpose of accomplishing roles and responsibilities.

*Designate, Identify, Develop, etc.*, shall be understood to require such actions be specific and in writing.

### 1-1-7. SCOPE

Quality assurance is a dynamic process used to continually improve an air traffic system that is already acknowledged to be the best in the world. Although we will continue to measure the quality of our service by some historical methods, such as the number of operational errors, delays, employee and customer feedback, we must also recognize factors that cannot as readily be measured. Our willingness to function as a team, our training, and the actions taken to support the goal of zero operational errors all factor into quality assurance. The success of our quality assurance efforts is dependent on the recognition by the entire air traffic workforce that all of us, independently and collectively, must strive to provide the best service possible. We are all accountable for the quality of that service.

# Chapter 2. QUALITY ASSURANCE (QA) PROGRAMS

## Section 1. GENERAL

### 2-1-1. OVERVIEW

A critical component of any effective quality assurance program is problem prevention. This chapter provides a list of proactive quality assurance strategies. While it is by no means all-inclusive, it does provide some ideas that may be developed into each program. Their inclusion here, in the body of this order rather than in an appendix, was made to emphasize the importance of proaction to effective quality assurance.

### 2-1-2. RESPONSIBILITIES

a. Manager, Air Traffic Evaluations and Investigations Staff, AAT-20, shall:

1. Provide guidance and assistance to Regional Air Traffic Divisions to develop their QA Programs.

2. Ensure all organizations' QA Programs are evaluated through the national evaluation process.

3. Provide an annual assessment to the Director of Air Traffic, AAT-1, of regional QA Programs and system performance.

b. Regional Air Traffic Division (ATD) Managers shall:

1. Develop a Regional QA Program.

2. Identify which facilities within the region shall be required to develop a Facility QA Program.

3. Submit the completed Regional QA Program to AAT-20.

c. Hub Managers/ATM's shall:

1. Maintain a level of awareness and involvement in their facility's operations/programs so as to ensure their maximum quality and efficiency.

2. Develop a Facility QA Program as directed by the ATD or Hub manager.

3. Identify which facilities within their Hub shall be required to develop a Facility QA Program.

### 2-1-3. PROGRAM CONTENT

QA programs shall establish methods to identify and correct deficiencies and recognize successes in, as a minimum, the following four areas:

a. Operational Error and Operational Deviation (OE/D) Prevention.

1. The following is a list of ideas that may be developed to preclude OE/D's from occurring:

(a) Hearback/readback programs.

(b) Surface error programs.

(c) Incentive/recognition programs.

(d) Employee of the Month/Quarter programs.

(e) List of good operating practices.

(f) Tape talks.

(g) Simulation training.

(h) Personal accounts of lessons learned.

(i) Periodic QA briefings in the facility covering trends, customer input, evaluations, etc.

(j) Aggressive resolution of problems identified by the Unsatisfactory Condition Report (UCR) program.

(k) Review of Monitor Alert Parameters (MAP).

(l) Incorporate old OE scenarios into training program.

2. In addition, Regional QA Programs shall include procedures for the regular, periodic review of facilities' OE/D trends using the Analysis of Variance program (ANOVA). These procedures shall provide for appropriate investigation and reporting of observed trends.

b. Teamwork. The following is a list of ideas that may be used to promote teamwork within the air traffic control specialist (ATCS) workforce, administrative workforce, and between facilities, outside entities, etc.:

1. Air Traffic Teamwork Enhancement (ATTE) training; internal and external teams.

2. Teamwork incentive/recognition programs.

3. Roles of different positions/jobs (facility-wide cross training).

4. Supervisor skills course.

5. Team meetings.

6. Expectations clearly communicated.

c. Communications. The following is a list of ideas that may be used to improve communications among all employees to create an atmosphere conducive to sharing information:

1. Electronic Bulletin Board System.

2. Internet/Intranet access to data.

3. National Database – containing facility, regional and national QA data.

4. Newsletter(s) – electronic editions where possible.

5. QA seminars and conferences.

6. System wide QA telecons.

7. Team briefings on trends and issues.

8. All hands meetings.

9. Industry reports (e.g. National Transportation Safety Board (NTSB) reports; Aviation Safety Reporting System (ASRS), Air Line Pilots Association

(ALPA), and Aircraft Owners and Pilots Association (AOPA) newsletters).

d. Customer Service/Feedback. The following is a list of ideas that may be used to solicit employee and customer feedback (internal/external customers) regarding the quality of service provided by the facility and the organization's impact on other organizations, users, and individuals:

1. Operation Raincheck/Operation Takeoff.

2. Surveys of internal and external customers.

3. Interaction with other organizations – NTSB, Flight Standards District Office (FSDO), Department of Defense (DOD).

4. Employee evaluation of shift performance.

5. All hands meetings.

6. SUPCOM.

7. Familiarization flights.

8. Contacts with user organizations (e.g. Fixed Base Operators, Flight Schools).

9. Pilot safety seminars and airport management workgroups.

# Chapter 3. TECHNICAL TRAINING DISCUSSIONS

## Section 1. GENERAL

### 3-1-1. OVERVIEW

To provide for the continuous enhancement of technical proficiency in the air traffic workforce, individualized training requirements for technical performance must be identified and accomplished. FAA Order 3120.4 provides direction on technical proficiency training that shall be followed in accomplishing the procedures contained in this chapter.

### 3-1-2. RESPONSIBILITIES

a. The first-level supervisor shall accomplish the following for each of their employees who are certified on at least one operational position:

1. Continuously assess the employee's technical performance through both direct and indirect methods. Indirect methods may include remote monitoring, tape reviews, and the Systematic Air Traffic Operational Research Initiative (SATORI).

#### NOTE-

*SATORI combines radar data recorded in the HOST computer system and voice recordings for a visual display of information. This allows review of aircraft and air traffic situations within requested time and airspace parameters. SATORI may be used as a "lessons learned" tool to recreate the events that contributed to an OE/D, incident, accident, or other operational scenarios.*

2. Develop and direct individualized technical training that appropriately addresses identified technical performance issues.

#### NOTE-

*Technical performance issues consist of areas of technical performance that might benefit from technical training. These issues are not necessarily areas of deficiency. An employee may demonstrate overall acceptable technical performance, but might benefit from technical training in a particular skill or task.*

3. Regularly conduct documented technical training discussions about the individualized technical training that has been accomplished and/or will be conducted to address technical performance issues. If no new issues have been identified, a documented

discussion shall still take place to advise the employee of this. These discussions shall be conducted:

(a) Whenever the first-level supervisor identifies an area in an employee's technical performance that might benefit from individualized technical training.

(b) No later than 6 months from the employee's previously documented technical training discussion.

(c) No later than 60 days after the first-level supervisor assumes supervisory responsibility for an employee who has not had a technical training discussion documented during the previous 6 months.

4. Ensure all technical training identified is completed in a timely manner.

5. Ensure all discussions conducted under this chapter are documented as described in paragraph 3-1-3, Documentation.

b. Facility staff assigned quality assurance responsibilities shall:

1. At least once every 12 months, review all technical training accomplished. Compile this information in a report to the ATM.

2. Advise the responsible first-level supervisor, in a timely manner, of any employee's technical performance issue which they identify.

c. The ATM shall:

1. Identify facility technical training objectives and ensure those objectives are met.

2. Identify facility technical performance trends and ensure appropriate follow-up action is completed.

3. Ensure that first-level supervisors have access to employees' training records in the course of their official duties.

### 3-1-3. DOCUMENTATION

Each technical training discussion shall be documented in the employee's FAA Form 3120-1, Training and Proficiency Record, in accordance with FAA Order 3120.4, specifically noting:

a. Name and signature of the first-level supervisor conducting the discussion.

b. If no technical performance issues were identified, a statement to that effect shall be included.

c. Date discussion was completed.

# Chapter 4. AIR TRAFFIC INCIDENTS

## Section 1. GENERAL

### 4-1-1. DEFINITIONS

There are several types of incidents that adversely affect the capabilities of air traffic control (ATC) facilities to provide safe, orderly, and expeditious movement of air traffic:

a. The following incidents are defined and their reporting procedures are provided for by FAA Order 8020.11:

1. Aircraft Accident.
2. Near Midair Collision (NMAC).
3. Pilot Deviation.
4. Vehicle and Pedestrian Deviation.

b. The following definitions are for incidents whose reporting procedures are provided for by this chapter:

1. **Emergency:** A distress or urgent situation that requires special handling of an aircraft by air traffic (AT); includes giving priority resulting in delays to other aircraft.

2. **Flight Assist:** When in-flight assistance is provided to an aircraft in a potentially dangerous situation.

3. **Military Facility Deviation:** An operational error or operational deviation that involves delegated AT responsibilities performed by a military facility, including all Authorization for Interceptor Operations (AFIO) deviations.

**NOTE-**

*This category does not include instances when approved separation minima are used between military aircraft that are less than those used by the FAA.*

4. **Spill Out:** An excursion of a military aircraft, or a civil aircraft contracted to the military, including remotely operated aircraft, from the exterior boundary of Special Use Airspace (SUA) allocated to military using agencies into other controlled airspace without coordination or approval. SUA includes Altitude Reservations (ALTRV); ATC Assigned Airspace (ATCAA); Military Operations Areas (MOA); Military Training Routes (MTR); Prohibited, Restricted, and Warning Areas.

c. **Operational Errors and Operational Deviations** are defined and their reporting procedures provided for by Chapter 5.

### 4-1-2. GENERAL HANDLING PROCEDURES

In addition to any procedures provided for by other FAA orders and other sections of this document, the following procedures shall be applied to all air traffic incidents:

a. **Compiling Information.** The facility first learning of or primarily involved in an incident shall obtain and complete a summary of the pertinent data immediately upon learning of the incident, or as soon thereafter as duties permit, to meet the reporting time requirements for the particular incident. A reference to this incident shall be logged on FAA Form 7230-4, Daily Record of Facility Operation.

b. **Incidents Involving More Than One Facility.**

1. The ATM's of the involved facilities shall cooperate in the investigation and the preparation of the final report.

2. If circumstances prevent collaboration, the facility most involved shall prepare the final report and provide a copy to the other.

3. In any event, do not submit individual reports on the same incident.

4. When facility or regional boundaries overlap, send a copy of the final report to each ATD involved.

5. When an incident occurs and it is suspected by the facility most involved that other facilities may have provided services (flight plan, pilot briefing, radio contact, etc.), transmit a priority FF message on Service B to all facilities as follows (text only): "Advise whether any services provided (aircraft identification) today (or specify date). Negative replies requested."

(a) Limit the reply to the message reference, the aircraft identification, the services provided, and the time and the date the records will be forwarded.

**EXAMPLE-**

*(text only): Reference message from your office (RUMES) (date-time) N1235M. Pilot briefed 1410, VFR flight plan filed. Records will be mailed (date).*

(b) After consulting the employee involved, if necessary, prepare a narrative summary of the contact and attach facsimile copies of the pertinent records.

**NOTE-**

*FSS's are responsible for the immediate delivery of the request message (either by telephone or hand delivery) to addressees in their flight planning area.*

c. **Telegraphic Notification.** Any incident that warrants telegraphic notification will require adherence to the following procedures:

1. The message shall be a numbered operational priority message.
2. No part of the message shall exceed twenty lines as that will cause an incomplete message to be relayed.
3. The originating facility shall receive and record an acknowledgment from each addressee.

d. **Post Accident And Incident Coordination.** As part of the initial process for handling accidents or serious incidents, it is imperative that facilities remain aware of the potential personal impact to involved individuals and to any special needs or requests that may develop as a result. To that end, the ATD must ensure that appropriate regional counterparts are kept abreast of developing information so that they may participate in subsequent decisions affecting facility personnel.

1. ATM's shall, following a major aircraft accident or serious incident, contact the regional ATD and provide an assessment of the personal effect on facility personnel. Additionally, any proposed personnel action that results from the incident, shall be coordinated with the appropriate regional offices.

2. ATD Managers shall be responsible for ensuring that subsequent coordination is accomplished as necessary with the Aviation Medical Division, Human Resource Management Division, as well as the Assistant Chief Counsel. Employee Assistance Program Coordinators or Contractors should also be alerted to the potential need of their services. Additionally, any proposed personnel action that results from the incident, shall be coordinated with AAT-20 before initiation.

e. **Coordination With Regional Counsel.** Incidents resulting in personal injury or property damage may result in a lawsuit. In such event, the files and records relating to the investigation and any actions taken may be subject to disclosure to the attorneys for the litigants and produced in court. Therefore, coordinate follow-up actions with the Regional Counsel. The purpose of this action is not to minimize or restrict actions but to provide assurance that the findings upon which the action is taken contain no misleading language resulting in possible liability to the agency or the individual.

#### 4-1-3. EMERGENCIES

a. When appropriate, make emergency notification using FAA Form 8020-3, Facility Accident/Incident Notification Record.

b. Compile the information and document on FAA Form 7230-4, Daily Record of Facility Operation, the events, the notifications, and the termination of the emergency.

c. Notify the ATD, Washington Headquarters, and the appropriate FSDO through the Regional Operations Center (ROC) whenever:

1. The aircraft involved is an air carrier, a commuter, or an air taxi; or
2. The aircraft is carrying members of Congress or prominent persons; or
3. The emergency is or may become newsworthy by coming to the attention of the public or the news media.

d. Prepare FAA Form 8020-11 in accordance with FAA Order 8020.11.

#### 4-1-4. FLIGHT ASSISTS

a. Obtain the information required to complete FAA Form 7230-6, Flight Assist Report, in draft and include the pilot's name and address if obtainable. Instructions for completing FAA Form 7230-6 are contained in Appendix 6.

b. Promptly notify the FSDO on all occasions where flight assistance is given to a pilot and provide the information requested.

c. When another pilot helps in providing flight assistance, obtain the assisting pilot's name and address, via telephone, and include in Item 16 of FAA Form 7230-6.

d. Information concerning flight assists of an outstanding nature shall be forwarded to the ATD during administrative hours or as required by the ATD.

e. **Pilot Recognition.**

1. When a pilot aids in providing flight assistance, the ATD shall review the circumstances, and if appropriate, write a letter of recognition. Attach a copy to the final report.

2. When pilot assistance is of an outstanding nature, the ATD shall review the circumstances, and if appropriate, prepare a regional level letter of recognition.

f. Prepare the final report within 10 administrative days of the occurrence and include the following:

1. The pilot's name and address, if obtainable, in Item 16.
2. If the assistance was of an outstanding nature, enter the word "Outstanding" at the top center of the form.

3. If a pilot helps in providing assistance, include their name in Item 16.

4. Indicate in Item 16 when an FAA Form 8020-17, Preliminary Pilot Deviation Report, is filed as a result of a flight assist.

5. For outstanding flight assists, indicate in item 17 the name of the employee primarily responsible for the assist. All other names in item 17 will be considered as having provided additional assistance.

g. Distribute FAA Form 7230-6 as follows, and indicate on the original to whom the copies are routed:

1. The original to the facility's files.
2. The ATD.
3. ATX-430.
4. The FSDO.
5. Others as determined by the ATD.

#### 4-1-5. MILITARY FACILITY DEVIATIONS

a. The AT facility or representative (ATREP, RADLO, etc.) noting or receiving information about a military facility deviation shall report the occurrence immediately to the respective ATD.

b. Report the deviation in narrative form by memorandum within 10 administrative days of the occurrence. Prepare the report as follows:

1. The report number shall be composed of the letter "M," followed by the last digit of the calendar year, a slant line, and the sequential number of military facility deviations forwarded by the reporting FAA office. Use a new sequence of numbers beginning January 1 of each year.

2. Include a brief chronological summary of the incident. Details shall be as complete as security considerations and data availability will permit.

3. Include a brief statement of the probable cause or causes if the available data is sufficient to make these conclusions.

4. Include recommendations, as appropriate, to preclude a recurrence of the event.

c. Distribute the report as follows:

1. Original to the ATD.
2. Facility's files.
3. AAT-20.
4. Military Distribution:

(a) Designated Regional Office Military representative.

(b) Send one copy to the appropriate military service headquarters.

(1) Air Force:

HQ AFFSA/XVO  
1535 Command Drive  
Suite D302  
Andrews AFB, MD 20331-7002

(2) Army

Director  
USAASA  
9325 Gunston Road  
Suite N-319  
Fort Belvoir, VA 22060-5582

(3) Navy/Marine

Chief, Air Traffic Branch  
(OP-54)  
Navy Department  
Washington, DC 20350

#### 4-1-6. SPILL OUT

Spill out reporting is a non-punitive program to identify design or procedural problems within SUA. Facilities shall report all spill outs and forward the following information to AAT-20, with an information copy to Manager, Military Operations/Procedures, ATO-130, via data communications Service B message, within 1 administrative day of the incident. In addition to the above notification requirement, if the spill out resulted in a loss of separation or report of a NMAC with another aircraft outside the SUA, forward the following information to AAT-20 via the Washington Operations Center (WOC) within 3 hours of the incident:

- a. The reporting facility.
- b. The date and the time (UTC) of the incident.
- c. The aircraft identification and type.
- d. Branch of Military service.
- e. The assigned special use airspace.
- f. Military Radar Unit.
- g. Controlling/monitoring facility.
- h. Summary of events.

#### 4-1-7. AIRSPACE INTRUSIONS

Intrusions are reported in accordance with FAA Order 8020.11.

a. ATM's (excluding AFSS and FSS managers) shall provide guidance in facility directives for the tracking and identification of aircraft that enter Class A or B airspace without authorization; or Class C or D airspace without establishing communications with air traffic control (ATC).

**NOTE-**

*The Chief Counsel's office has instructed the regional Counsel offices to include the ATD on their distribution lists for notification following final enforcement action on controlled area intrusions.*

b. When enforcement action is taken as a result of a controlled area intrusion, the ATD shall be responsible for ensuring notification through the facility ATM to the reporting controller of the outcome of the enforcement action.

#### **4-1-8. CIRVIS MESSAGES**

JANAP 146 (E), "Canadian-United States Communications Instructions For Reporting Vital Intelligence Sightings," (CIRVIS) is an unclassified, non-registered publication prepared by the US Military Communications-Electronics Board in conjunction with Canada for joint United States and Canadian use. The DOD Flight Information Handbook, Section B

containing extracts from JANAP 146 (E), should be in all facilities. ARTCC's shall forward CIRVIS reports immediately to the appropriate military facility as prescribed by agreement with the appropriate military commander.

#### **4-1-9. INVALID MODE C REPORTING**

In order to track and report aircraft with transponders equipped with invalid Mode C readouts whose pilots have been advised to stop the altitude squawk, facility managers shall provide guidance in facility directive(s) to ensure that a designated facility officer compiles a weekly list of invalid Mode C reports and forwards this to the Regional Office FSDO by memorandum. This report shall include:

1. Aircraft registration number/call sign.
2. UTC date and UTC time of the incident.
3. Assigned altitude and Mode C reported altitude.
4. Facility 3-character identifier and facility type.

**NOTE-**

*A negative report is not required.*

# Chapter 5. AIR TRAFFIC OPERATIONAL ERRORS AND DEVIATIONS, INVESTIGATION AND REPORTING

## Section 1. GENERAL

### 5-1-1. DEFINITIONS

a. **Operational Error:** An occurrence attributable to an element of the air traffic system in which:

1. Less than the applicable separation minima results between two or more aircraft, or between an aircraft and terrain or obstacles (e.g., operations below minimum vectoring altitude (MVA); equipment / personnel on runways), as required by FAA Order 7110.65; or

2. An aircraft lands or departs on a runway closed to aircraft operations after receiving air traffic authorization.

b. **Operational Deviation:** An occurrence attributable to an element of the air traffic system in which applicable separation minima as referenced in paragraph 5-1-1a was maintained, but:

1. Less than the applicable separation minima existed between an aircraft and protected airspace without prior approval; or

2. An aircraft penetrated airspace that was delegated to another position of operation or another facility without prior coordination and approval; or

3. An aircraft penetrated airspace that was delegated to another position of operation or another facility at an altitude or route contrary to the altitude or route requested and approved in direct coordination or as specified in a letter of agreement (LOA), pre-coordination, or internal procedure; or

4. An aircraft, vehicle, equipment, or personnel encroached upon a landing area that was delegated to another position of operation without prior coordination and approval.

c. **Operational Duties:** Duties that require an employee to issue or relay an ATC clearance or instruction; make a control decision that will affect coordination; perform a strip marking function or update computer generated information that may be used by an AT controller to make a control decision; or supervise these duties.

### 5-1-2. SUSPECTED EVENT

Any employee who is aware of an occurrence that may be an OE/D shall immediately report that occurrence to any available supervisor or Controller-in-Charge (CIC).

### 5-1-3. PRELIMINARY INVESTIGATION

The preliminary investigation is fact finding in nature, designed to determine what occurred in the system, and to report significant events to higher levels of management.

The area supervisor shall determine the validity of suspected OE/D's and, if valid, shall ensure the following is accomplished:

a. When information indicates that an OE/D may have occurred in another facility, promptly advise that facility's supervisor-in-charge.

b. Provide relief to any employee who appears to be involved in the incident from all operational duties as promptly as operational and staffing conditions permit. This action allows employees an opportunity to review the voice recordings and prepare draft statements while the circumstances are fresh in their minds. The relief of an employee from operational duty also provides the employee the opportunity to participate in the investigation.

c. Gather flight progress strips, weather data, and other pertinent information. If another facility is involved, that facility shall provide the reporting facility's supervisor with all the pertinent data necessary for the timely completion of the preliminary report.

d. Review voice recordings and, as soon as feasible, prepare a cassette re-recording from the original to be used as a working tape.

e. Review available computer data, e.g., National Track Analysis Program (NTAP) or Continuous Data Recording (CDR) data.

f. Conduct preliminary interviews as required.

g. Notify the ATM of the OE/D.

h. Ensure that FAA Form 7210-2, Preliminary Operational Error/Deviations Investigation, is completed. When writing the summary, be as clear and concise as possible using who, what, when, where, and how to describe the events. Instructions for completing FAA Form 7210-2 are contained in Appendix 1.

i. Notify the WOC and the ATD through the ROC by telephone with the information on FAA Form 7210-2 within 3 hours of the time the occurrence is first reported or suspected. Although FAA Form 7210-2

may be faxed to the ROC and WOC to expedite the call in process, telephone notification shall be made to officially report the OE/D.

j. Employees believed to be contributory shall not be assigned to operational duties until the provisions of paragraph 5-1-7, Return to Operational Duty, are met; and

k. If the preliminary investigation reveals that certain employees first believed to be contributory were not, they may be returned to duty without further action. If these employees have knowledge of the events, obtain their views and recommendations.

#### **5-1-4. FOLLOW-UP INVESTIGATION**

a. The ATM of the facility whose personnel were responsible for the separation of the aircraft involved, regardless of where the OE/D occurred, shall:

1. Ensure that OE/D investigations are conducted in accordance with any negotiated agreements between the FAA and pertinent labor organizations.

2. When the Preliminary OE/D Investigation Report indicates that another facility is involved in the occurrence, as soon as feasible confer with other ATMs to determine the scope of the other facility's investigative effort and how long it will take. This includes gathering data and completing Parts I and II of FAA Form 7210-3, Final Operational Error/Deviation Report. If the reporting ATM and the other ATM cannot concur in any phase of their respective investigations, their differences shall be reported to the ATD for a resolution.

3. Designate the Investigator-In-Charge (IIC). The IIC may be designated on a rotational or permanent basis. The IIC's function shall be performed by supervisory personnel or the facility staff. If the only facility officer is the ATM, and there are no assigned supervisors, the ATM performs the IIC's functions.

4. Designate a team to assist the IIC in the investigation of each OE/D. The ATM shall determine the size and composition of the team, but shall as a minimum afford:

- (a) Union designated representative reasonable opportunity to participate as a member of the investigative team.

- (b) Operational considerations permitting, employees believed to be contributory to the event shall be given the option to participate in the investigative process, except during the interview of other employees.

5. Ensure the preparation of FAA Form 7210-3. Instructions for completing FAA Form 7210-3 are contained in Appendix 3.

- b. The ATM of any other involved facility shall be responsible for providing the reporting facility with information and assistance as required. This may require an investigation on the same scale as the reporting facility, in which case the ATM shall have the same responsibilities as defined under paragraph 5-1-4a. The ATM of any other involved facility shall also be responsible for retaining all pertinent original data until notified of release by AAT-20.

- c. The IIC is responsible for conducting a complete investigation and shall be the final authority for the findings and recommendations to be submitted to the ATM. In addition the IIC shall:

1. Ensure that all pertinent data has been collected and documented in Part I of FAA Form 7210-3 and distributed to the ATM.

2. When other facilities are involved, ascertain the scope of their investigation and coordinate the exchange of data and assistance as required.

3. Assign duties to team members.

4. Conduct interviews in accordance with paragraph 5-1-5b, Interviews.

- d. The IIC Investigative Team shall:

1. Assist the IIC by performing and completing all assigned tasks.

2. Remain under the supervision and jurisdiction of the IIC until relieved by the IIC or ATM.

#### **5-1-5. INVESTIGATION PROCESS**

a. Fact Finding. The investigation of an OE/D must entail an in-depth inquiry into all causal factors. The following should be considered for a thorough investigation:

1. Facility procedures.

2. Facility training.

3. Facility supervision.

4. Equipment.

5. Control environment.

6. External factors.

7. Controller action.

8. Airspace configuration.

9. Traffic flow.

10. Pilot actions, including the consequence of any Traffic Alert and Collision Avoidance System (TCAS) event.

11. Weather.

12. Position configuration.

13. Coordination procedures.

**14. Airport environment:**

- (a) Runway markings.
- (b) Ramp use.
- (c) Areas of poor visibility.
- (d) Runway configuration.
- (e) Congestion.

**15. Human factors.**

**16. Accuracy of the automated radar terminal systems (ARTS) clock.**

**17. Radar Data (see 5-1-5d, Radar Data).**

**b. Interviews.** Certain information which is necessary to complete FAA Forms 7210-2 and 7210-3 must be obtained from the employees involved. Since many employees in the facility, e.g., controllers, air traffic assistants, and supervisors, may be knowledgeable of or a party to the incident, interviews with all possibly involved personnel shall be held. It is imperative that these interviews be conducted in an atmosphere of shared concern as to the events leading to and surrounding the incident. When an interview is conducted, the following shall apply:

**1.** The statement in Appendix 8, Interview Statement, shall be read or given to an employee before conducting an interview.

**2.** An employee who is a member of a bargaining unit may elect to have a union representative present during the interview, in accordance with the applicable negotiated agreement.

**3.** An employee who is interviewed shall be afforded the opportunity to submit written comments and recommendations. These comments/recommendations shall be prepared in accordance with paragraph 5-1-10, Final Reports.

**4.** Interviews shall be conducted by supervisory personnel, designated IIC's, or ATM. Investigative team members, other than the involved employees, may participate in the interviews.

**5.** Every effort shall be made to conduct interviews during the employee's regularly assigned shift and within the employee's assigned facility.

**c. Voice Recordings.** Two certified cassette re-recordings, one marked "Original" and the other marked "Copy," shall be made from the original voice recording that shall include the time track, when available, and all communications for a period of 5 minutes before initial contact to 5 minutes after the last contact with each position involved in the OE/D. When re-recordings are made from digital voice recording system (DVRS) equipment, this period will be from the

call file immediately preceding and immediately after the 5 minute before and after requirement. Both tapes shall be retained in the OE/D file. Certification and labeling of these cassettes shall be in accordance with FAA Order 8020.11.

**d. Radar Data.**

**1.** NTAP may be used for the declaration of an OE/D at an enroute facility provided all the following conditions are met:

(a) A plot size of 12 NM is used in measuring the distance.

(b) The following plot keywords are used:

(1) PRI (primary targets); or

(2) BCN (beacon targets); or

(3) LDB (limited data blocks); or

(4) SEL (select plots only BCN or LDB associated with particular beacon codes input on the code card); or

**NOTE-**

*SEL is a stand-alone option or can be used as a sub-option of BCN to plot aircraft on particular beacon codes.*

(5) A combination of the above options.

(6) LSTA (list data), a special plot keyword is used to create separate data listings for each of the four list (LST) options.

(7) 1/5 mile is added to the distance between the printed symbol centers before making a determination. This accommodates the high-speed printer limitations.

(8) If target position jumps have occurred, a smoothed line may be drawn indicating the most probable flight path. That line may be used for measurement purposes.

(9) The NTAP plot is used to declare an OE/D only if the Air Route Traffic Control Center (ARTCC) providing the computer data was responsible for the separation of the aircraft involved.

**2.** Computer operational error detection software measurements are more precise than NTAP measurements. An error detection alert measurement cannot be invalidated by an NTAP plot measurement by the ARTCC receiving the alert unless at least one target position used in the alert message is clearly a significant target jump.

**3.** CDR data may be used in the investigation of reported incidents believed to be OE/D's to determine the amount of separation that existed or the position of aircraft. CDR data may not be used as the primary source

for reporting an OE/D or commencing an investigation. When CDR data is used in this capacity, the Automated Radar Terminal Systems (ARTS) clock shall be verified as accurate and each plotted target shall be verified as valid.

4. SATORI may be used in the investigation of a reported OE/D, incident, or accident to determine the relative position and separation of aircraft. SATORI shall not be used to make the final determination for whether an OE/D has occurred. SATORI may be used to research the events associated with the occurrence of an OE/D after such determination has been made.

#### 5-1-6. RECLASSIFICATION

a. After preliminary notification procedures are completed, a review of the data may indicate a reclassification of the incident to one of the following:

1. Pilot deviation.
2. Military facility deviation.
3. From an operational deviation to an operational error.
4. From an operational error to an operational deviation.
5. No occurrence.

b. If a reclassification is determined to be appropriate:

1. The ATM shall:

(a) Complete FAA Form 7210-5, Operational Error/Deviation Reclassification Report.

#### **NOTE-**

*If a reclassification is from an operational deviation to an operational error or from an operational error to an operational deviation, then reclassify the original incident to a "No Occurrence" and indicate in the supporting documentation the new OE/D report number.*

(b) Forward FAA Form 7210-5, along with the rationale and all necessary supporting documentation, including voice tapes and radar data, to the ATD for review.

2. The ATD shall approve or disapprove the request. If the request is approved, forward the entire package within 5 administrative work days to AAT-20.

3. AAT-20 shall audit all reclassification approvals. In the event an audit determines that the approval may not have been justified, coordination will be effected with the appropriate ATD. In no case, shall any action be taken against a controller involved in an OE/D that has been reclassified and is later determined to be an OE/D.

4. Facilities shall retain all original forms and investigative data for a period of 2 1/2 years.

#### 5-1-7. RETURN TO OPERATIONAL DUTY

a. The ATM shall remain involved in the post error process, including a review of supervisors' determinations under paragraph 5-1-7b(4), to ensure complete and consistent handling of all incidents.

b. Before an employee is returned to duty, the employee's first-level supervisor shall take the following actions:

1. Conduct an in-depth review of the employee's role in the OE/D. This review shall include as a minimum:

(a) The events leading up to and surrounding the incident.

(b) The employee's statement.

(c) The results of the interview required in paragraph 5-1-5b, Interviews.

(d) The procedure or the separation standard involved.

(e) Available voice recording of the incident.

(f) The training record, including all applicable technical training discussions.

(g) Verification of currency on the position of operation.

(h) Applicable computer data.

(i) Employee involvement in previous OE/Ds during the past 2 1/2 years.

(j) Results and recommendations from the IIC/ investigative team and/or the facility OE/D review board, if applicable, and if available in a timely manner so as to not unduly delay the employee from returning to duty.

2. Identify all problems/deficiencies in the employee's performance associated with the OE/D.

3. Determine whether to decertify an employee in consideration of performance deficiencies identified in the above review. Decertification shall not be based solely on involvement in the OE/D but rather the controller's performance associated with the error. Decertification may be appropriate if documentation of previous similar performance deficiencies exist or if the deficiencies denote a safety concern.

4. Upon completing the review of the above items, the first-level supervisor will determine the appropriate actions necessary in order to return the employee to duty. The first-level supervisor will then brief the ATM on the issues associated with the error and the planned actions prior to returning the employee to duty.

(a) If the employee has been decertified, these actions shall include a remedial action plan developed in accordance with FAA Order 3120.4.

(b) These actions may also include skill enhancement training to address identified performance issues.

5. Accomplish recertification in accordance with FAA Order 3120.4, if the employee has been decertified. Upon satisfactory completion of recertification, the employee shall be returned to duty.

6. Conduct a performance skill check, if the employee has not been decertified. If positions are typically combined, the performance skill check may be conducted on those positions while combined. If a position is not typically combined with another, the performance skill check shall be conducted separately on that position:

(a) Upon satisfactory completion of the performance skill check, the employee shall be returned to duty; or

(b) If the employee fails to successfully complete the performance skill check, then the employee shall be decertified and the provisions of FAA Order 3120.4 applied.

#### **5-1-8. WHEN THE AIR TRAFFIC MANAGER IS INVOLVED**

If the employee involved in the OE/D is the ATM, the requirements in paragraph 5-1-7, Return to Operational Duty, may be waived temporarily by the ATD manager. This waiver shall not exceed 2 weeks, pending the arrival of an ATD designee. Upon arrival, the ATD designee shall serve as the employee's certifying official for the purpose of complying with paragraph 5-1-7, Return to Operational Duty, and 5-1-9, Follow-up Performance Skill Check.

#### **5-1-9. FOLLOW-UP PERFORMANCE SKILL-CHECK**

The first line supervisor of an employee, found to be contributory to an OE/D, shall conduct, as a minimum, a follow-up performance skill-check of the employee, 30 days from the date of return to operational duty. The subsequent technical training review shall include those areas of concentration in any remedial training that was administered.

#### **5-1-10. FINAL REPORTS**

The ATM shall:

a. Analyze the data submitted by the IIC in Part I of the FAA Form 7210-3 to determine:

1. The classification of the occurrence; i.e., operational error, operational deviation, pilot deviation, or no occurrence. If it is determined that an OE/D can be reclassified, the ATM shall request that the incident be reclassified in accordance with paragraph 5-1-6, Reclassification.

2. The categorization of the OE/D; i.e., ATCS, manager/supervisor/other personnel, procedural, equipment, or any combination thereof.

3. The causal factors of the OE/D.

4. The recommendations and corrective actions to be taken to prevent a recurrence of the OE/D.

b. Provide copies of Part I and Part II to each employee involved, before completing Part II, Item 68, Facility Manager's Recommendations and Corrective Actions. If the employees do not feel that the facts of the report are correct, they may submit their comments in writing to the ATM within 5-calendar days of receipt. The comments shall include the employee's name, position function, and location of employment. The employee's signature shall be affixed at the end of the statement and dated. Recommendations should concern corrective actions that can be undertaken to preclude a similar occurrence. The ATM shall consider these comments in his/her deliberations before completing Facility Manager's Recommendations and Corrective Actions and shall append the employee's comments to Part II.

c. Complete Part II of the FAA Form 7210-3 and submit two copies of Parts I and II and all attachments (including employee and union statements) to the ATD, and one copy each to other ATM' and ATD's as required, within 30 administrative workdays of the date the occurrence was reported.

d. When an employee of another facility is involved in an OE/D, ensure that the employee's supervisor is provided sufficient documentation to determine the appropriate corrective action.

e. Provide involved employees with a copy of the complete report after receipt of Part III from the ATD.

f. Retain the original report in the facility files.

g. Establish a method of follow-up to evaluate the effectiveness of the local recommendations/actions which result from the investigation.

#### **5-1-11. ENTRIES IN TRAINING AND PROFICIENCY RECORD (FAA FORM 3120-1)**

When an employee's performance has been determined to have contributed to an OE/D, the following shall be entered into the employee's FAA Form 3120-1:

a. The causal factors, as determined by the ATM shall be fully transcribed and endorsed by the employee's

first-line supervisor on a separate page in Section VI. This page shall be used for any further reference to the OE/D and shall indicate the facility's name, the OE/D report number, and the removal date for the page.

b. Any associated training, remedial and/or skill enhancement, shall be logged, in accordance with FAA Order 3120.4, without reference to the OE/D.

c. Any associated position performance skill-checks, including all follow-up performance skill-checks (e.g., 30-day) shall be logged in accordance with FAA Order 3120.4, without reference to the OE/D.

d. Any associated recertification shall be logged, in accordance with FAA Order 3120.4, without reference to the OE/D.

### 5-1-12. DOCUMENTATION RETENTION

a. The OE/D investigation file shall:

1. Be retained by the reporting facility for 2 1/2 years from the date of the occurrence.

2. Be identified by a label (maximum size 3"x5") clearly marked "OPERATIONAL ERROR" or "OPERATIONAL DEVIATION," the report number, the incident local date and time, and the local date to be destroyed.

3. Contain, as a minimum, the original FAA Forms 7210-2 and 7210-3, signed employee personnel statements and/or any similar supporting documents, the certified re-recording marked "Original," a second certified re-recording, and all documentation from the supervisor's training plan, performance skill-checks, or recertification.

b. All references to a specific OE/D shall be removed from the employee's FAA Form 3120-1 and returned to the employee 2 1/2 years after the incident.

### 5-1-13. HEADQUARTERS AND AIR TRAFFIC DIVISION ROLES AND RESPONSIBILITIES

a. AAT-1 shall be responsible for establishing and maintaining an analysis element within the headquarters office of Air Traffic Evaluations and Investigations Staff, AAT-20, which shall:

1. Maintain a central source of OE/D data.

2. Review all FAA Forms 7210-3, Final Operational Error/Deviation Report, for the purpose of identifying system wide deficiencies (e.g., human, equipment, and procedural) and based upon these reviews, initiate recommendations for corrective actions to reduce the number of OE/D.

3. Distribute, on a semi-annual basis, an OE/D Analysis Report. This report shall, as a minimum,

identify trends concerning deficiencies specified in paragraph 5-1-13a(2) and be sent to all regions and AT facilities.

4. Conduct periodic program evaluations to determine the effectiveness and efficiency of this program.

5. Maintain liaison with the regions, facilities, and other headquarters AT offices and services to provide continuity and follow-up on corrective action recommendations.

6. Provide policy interpretations concerning the administration of this program.

7. Review and maintain oversight of reclassification approvals from ATD.

b. The ATD shall be responsible for establishing an analysis element within the ATD, which shall:

1. Within 10 administrative workdays after receipt of Parts I and II of FAA Form 7210-3:

(a) Review Parts I and II and complete Part III. Completion of Part III ends the investigation process.

(b) Send copies of the completed FAA Form 7210-3, Parts I, II, and III and all attachments, including employee and union statements, to AAT-20 and the Safety Data Services Division, ASY-100.

(c) Send a copy of Part III to the appropriate ATM's and other ATD's, when required, and retain the original in the regional files.

2. If the above cannot be completed within the 10-day time period, notify AAT-20 via telephone.

3. Review all requests to reclassify OE/D's for completeness of data and to ensure their validity before approving or disapproving. Send the approvals in accordance with paragraph 5-1-6, Reclassification, to AAT-20.

4. Establish a follow-up mechanism to determine if corrective actions contained in FAA Forms 7210-3 are accomplished. All corrective actions shall specify a completion deadline.

5. Provide regional assistance to facilities as required.

6. Work closely with other ATD's when an OE/D may involve facilities in different regions and the respective ATM's cannot concur in any phase of their investigations. If 30 administrative workdays have passed since the incident and an agreement cannot be reached with the other ATD's, forward all investigative data to AAT-20 for resolution. Until full agreement is reached, ensure that all recordings, data and documentation pertaining to the incident are retained.

## Appendix 1. Instructions For FAA Form 7210-2, Preliminary Operational Error/Deviation Investigation

U / I SH

National Stock No. 0052-00-876-5001

REPORT NUMBER:

FAC ID: Enter the facility three-character identifier.

TYPE: Enter the type of facility:

“T” – Terminal

“R” – TRACON

**NOTE-**

Use “R” for radar only facilities assigned a separate three-character identifier

“C” – En Route

“F” – Flight Service

CY: Enter the last two digits of the calendar year in which the incident occurred

E/D: Enter “E” for an error or “D” for a deviation.

SEQ.#: Enter the sequential number of the incident for the calendar year.

Each calendar year operational errors will start with 001 and operational deviations will start with 001. For example, the facility’s second operational error is 002 and the thirteenth would be 013. The facilities second operational deviation will be 002 and the thirteenth would be 013.

**Block 1** Date is based on local time, not UTC

**Block 2** SELF-EXPLANATORY

**Block 3** SELF-EXPLANATORY

**Block 4** Enter “SFC” if this is a surface incident, otherwise enter altitude at which loss of separation occurred.

**Block 5** Use a VOR fix/radial/distance, that is compatible with the appropriate altitude stratum. For surface incidents, use runway numbers, taxiway names, or other locations found on airport diagrams.

**Block 6** Do not leave blank. If estimated, indicate method in 19C/Summary. Where no other aircraft were involved, as in closed –runways or MVA incidents, indicate and explain in 19C/Summary

**Blocks 7 – 10** SELF-EXPLANATORY

**Block 11** Check “Tower” if control was being provided by the tower cab. Also check “RADAR,” if the cab controller had radar available to provide separation.

**Block 12** Check “FAA DIRECTIVE” if the required separation was from an FAA directive such as FAA Order 7110.65, or a facility directive. Check “LETTER OF AGREEMENT” if the required separation was from a letter of agreement with another facility or organization. (e.g., An LOA requiring 8 miles separation between aircraft in specified areas.)

**Block 13** List all applicable systems in use during incident

**Blocks 14 – 16** Check “NOT INSTALLED” only if the facility does not have this feature. Check “NOT ACTIVATED” if this feature is installed and functioning, but did not generate an alert during the incident. Check “NOT AVAILABLE” if this feature is installed at the facility, but was not available during the incident. Check “ACTIVATED” if an alert was generated during the incident.

**Block 17**

**Item 1** Enter certification status, e.g., “FPL” or “DEV,” not name.

**Item 2** Enter Area or Function in which incident occurred, e.g., “Area B” or “Tower Cab.”

**Item 3** Enter Sector or Position Designation, e.g., “R71” or “South Satellite.” Enter all sectors/positions that were combined to the position at the time.

**Item 4 – 6** SELF EXPLANATORY

**Item 7** Indicate the number of aircraft for which the controller had separation responsibility, including point outs. For incidents involving tower cab local controllers, do not count aircraft waiting in line for departure unless the controller was, for some reason, responsible for separation.

**Item 8** If “YES,” incident report numbers and dates must be included.

**Block 18A** Identify the position or activity the supervisor was assigned to when the incident occurred.

**Block 18B** Describe the supervisor's actual activity while the incident occurred.

**Block 19A** This is a list of possible factors that may have been involved in the incident. The person filling out this form should use this block as a check list to help develop the description of events in the summary. Ensure that the rationale for each possible factor checked is clearly described in Block 19C/Summary.

**Block 19B** Provide the most applicable weather sequence (nearest in location and time to the OE/D), identifying the source and time. If weather can definitely be ruled out as a factor (e.g., as in

some high-altitude OE/D's) a "not applicable" notation may suffice.

**Block 19C** The description of events should be factual and concise, but must include all pertinent information. Ensure that the rationale for each possible factor checked in Block 19A is clearly described. Use terms such as "Aircraft #1" and "Controller A" rather than actual callsigns and position identifiers.

**Block 20** Indicate if the voice tape or computer data were reviewed before filing this report.

**Block 21** This is the person from the facility reporting the incident to regional and headquarters personnel.

**Block 22** This is the regional or headquarters person receiving the report.

# Appendix 2. Example of FAA Form 7210-2, Preliminary Operational Error/Deviation Investigation

## PRELIMINARY OPERATIONAL ERROR/DEVIATION INVESTIGATION

(RIS: 7210-3)

THIS IS PRELIMINARY DATA AND SUBJECT TO CHANGE  
INSTRUCTIONS ARE ON THE BACK OF PAGE 2A

REPORT NUMBER

917	- 0 -	917	- E -	0102
FAC ID	TYPE	CT	E/D	SEQ. #

1. DATE AND TIME OF OCCURRENCE: DATE (LOCAL) <u>01/06/97</u> TIME (LOCAL) <u>1,4,40</u> TIME (UTC) <u>1,9,40</u>			2. OTHER INVOLVED FACILITIES: FAC ID #1 _____ FAC ID #2 _____		3. INITIALLY REPORTED BY: <input checked="" type="checkbox"/> FACILITY _____ OTHER (EXPLAIN) _____	
4. ALTITUDE: <u>FZ 230</u> <small>INDICATE IF SURFACE</small>		5. LOCATION OF OCCURRENCE: <u>23 SSE 555</u> <small>PERTINENT FIX (F/R/D) OR AIRPORT SURFACE LOCATION</small>		6. CLOSEST PROXIMITY: VERTICAL _____ LATERAL (FT / MILES / MIN) _____		
7. AIRCRAFT #1: <u>N1234</u> <small>FLIGHT ID</small> <u>LR55/R</u> <small>TYPE</small>		8. AIRCRAFT #2: <u>N333LB</u> <small>FLIGHT ID</small> <u>BE20/R</u> <small>TYPE</small>		9. AIRCRAFT #3: <small>FLIGHT ID</small> _____ <small>TYPE</small> _____		10. AIRCRAFT #4: <small>FLIGHT ID</small> _____ <small>TYPE</small> _____
11. TYPE OF CONTROL: <input checked="" type="checkbox"/> RADAR <input type="checkbox"/> TOWER <input type="checkbox"/> NONRADAR <input type="checkbox"/> OCEANIC		12. REQUIRED SEPARATION WAS BY: <input checked="" type="checkbox"/> FAA DIRECTIVE <u>7110.65 5-5-1</u> , <u>5 MILES</u> <small>HANDBOOK AND PARAGRAPH REQUIRED SEPARATION</small> <input type="checkbox"/> LETTER OF AGREEMENT, WITH _____ <small>FACILITY OR CERG. PARAGRAPH REQUIRED SEPARATION</small>				
13. SYSTEMS IN USE: <input type="checkbox"/> N/A <input type="checkbox"/> DARC <input type="checkbox"/> ARTS III <input type="checkbox"/> ASDE <input type="checkbox"/> D-BRITE <input type="checkbox"/> ASR-9 <input type="checkbox"/> BROADBAND <input type="checkbox"/> ARTS II <input type="checkbox"/> ARTS IIIA <input type="checkbox"/> TPX-42 <input type="checkbox"/> CENRAP <input type="checkbox"/> EARTS <input checked="" type="checkbox"/> NARROWBAND <input type="checkbox"/> ARTS IIA <input type="checkbox"/> ARTS IIIE <input type="checkbox"/> BRTE IV <input type="checkbox"/> OTHER _____ <small>(EXPLAIN)</small>						
14. CONFLICT ALERT: <input checked="" type="checkbox"/> ACTIVATED <input type="checkbox"/> NOT AVAILABLE <input type="checkbox"/> NOT INSTALLED <input type="checkbox"/> NOT ACTIVATED <input type="checkbox"/> SUPPRESSED <small>(If installed, explain checked boxes in summary)</small>		15. MSAW/EMSAW: <input type="checkbox"/> ACTIVATED <input type="checkbox"/> NOT AVAILABLE <input type="checkbox"/> NOT INSTALLED <input checked="" type="checkbox"/> NOT ACTIVATED <input type="checkbox"/> SUPPRESSED <small>(If installed, explain checked boxes in summary)</small>		16. ASD MONITOR ALERT: <input type="checkbox"/> ACTIVATED <input type="checkbox"/> NOT AVAILABLE <input type="checkbox"/> NOT INSTALLED <input checked="" type="checkbox"/> NOT ACTIVATED <input type="checkbox"/> SUPPRESSED <small>(If installed, explain checked boxes in summary)</small>		
17. CONTROLLER INFORMATION <i>(Use SUMMARY to indicate any previous control experience; i.e., a different area of specialization and/or experience in different facilities.)</i>						
1. FPL/AS/AM/DEV/TMC/TMS/ATM/STAFF <u>FPL</u> <small>PRIMARY CONTRIBUTORY CONTRIBUTORY CONTRIBUTORY</small>						
2. AREA OF SPECIALIZATION. (e.g., AREA B, TOWER, TRACON, SOUTH AREA, etc.) <u>AREA B</u> <small>PRIMARY CONTRIBUTORY CONTRIBUTORY CONTRIBUTORY</small>						
3. SECTOR(S) AND/OR POSITION(S). LIST COMBINED SECTORS/POSITIONS AND USE SECTOR/POSITION NAME AND NUMBER IF APPROPRIATE. <u>R101 R102</u> <small>PRIMARY CONTRIBUTORY CONTRIBUTORY CONTRIBUTORY</small>						
4. POSITION FUNCTION (AS, R, HO, RA, C, LC, GC, CD, DEP, ARR, FD, ATA, etc.) <u>R</u> <small>PRIMARY CONTRIBUTORY CONTRIBUTORY CONTRIBUTORY</small>						
5. TIME (HRS/MIN) ON POSITION WHEN INCIDENT OCCURRED. <u>20 MIN</u> <small>PRIMARY CONTRIBUTORY CONTRIBUTORY CONTRIBUTORY</small>						
6. TIME (YEARS/MOS) SINCE LAST CERTIFIED ON THE POSITION. USE AN "I" OR AN "R" TO INDICATE IF INITIAL OR RECERTIFICATION. <u>6 MOS R</u> <small>PRIMARY CONTRIBUTORY CONTRIBUTORY CONTRIBUTORY</small>						
7. NUMBER OF AIRCRAFT CONTROLLER HAD CONTROL RESPONSIBILITY FOR AT TIME OF THE INCIDENT. <u>7</u> <small>PRIMARY CONTRIBUTORY CONTRIBUTORY CONTRIBUTORY</small>						
8. HAS THE CONTROLLER BEEN INVOLVED IN ANY PREVIOUS OPERATIONAL ERRORS OR DEVIATIONS WITHIN THE LAST 2 1/2 YEARS? IF "YES" LIST INCIDENT NUMBER(S) OR DATE(S). (e.g., YES, 000011) <u>NO</u> <small>PRIMARY CONTRIBUTORY CONTRIBUTORY CONTRIBUTORY</small>						

PRELIMINARY OPERATIONAL ERROR/DEVIATION INVESTIGATION

(RIS: 7210-3)

REPORT NUMBER

A	A	T	-	0	-	9	7	-	E	-	0	1	0	2
FAC ID			TYPE			CY			E/D			SEQ. #		

18. SUPERVISION:

A. WHERE WAS THE SUPERVISOR(S) ASSIGNED?

AREA B

B. WHAT WAS THE SUPERVISOR(S) DOING WHEN THE INCIDENT OCCURRED?

GENERAL SUPERVISION. HAD JUST WALKED BEHIND CONTROLLER

PLEASE DESCRIBE THE EVENTS SURROUNDING THE INCIDENT THAT OCCURRED. CONSIDER THE LIST OF FACTORS IN THE LEFT COLUMN BELOW AND DESCRIBE THEM AS NECESSARY TO EXPLAIN THE INCIDENT. BE BRIEF AS POSSIBLE BUT STILL FULLY EXPLAIN THE INCIDENT.

NOTE: IF THE SUMMARY DOES NOT ADEQUATELY DESCRIBE THE INCIDENT, FURTHER INVESTIGATION MAY BE INITIATED BY REGIONAL AND/OR HEADQUARTERS QUALITY ASSURANCE PERSONNEL.

19A. POSSIBLE FACTORS:

Check the appropriate involved or suspected factor(s) and describe in summary.

- CONTROLLER ACTIONS
- PRE-DUTY FAMILIARIZATION
- TRAINING
- ROUTE OF FLIGHT
- VFR FLIGHT PLAN
- TYPE OF AIRSPACE
- TRAFFIC COMPLEXITY
- TRAFFIC MANAGEMENT
- PRIOR TRAFFIC CONDITIONS
- COORDINATION
- LOCAL PROCEDURES
- EQUIPMENT CONDITION
  - COMMUNICATIONS
  - RADAR/COMPUTER
  - SOFTWARE VERSION
- EQUIPMENT IN TRANSITION
- AIRCRAFT
  - PERFORMANCE
  - EQUIPMENT
- OBSTRUCTIONS/OBSTACLES
- MVA/MIA/MEA/MOCA
- PERTINENT NOTAM's
- AIRSPACE CONFIGURATION
- RUNWAY CONDITIONS
- STAFFING
- SUPERVISION
- READBACK/HEARBACK
- NMAC FILED
- OTHER PERTINENT FACTORS

19B. WEATHER SEQUENCE:

N/A

19C. SUMMARY:

(Description of Events)

CONTROLLER WAS AWARE OF POTENTIAL CONFLICT AND ISSUED VECTORS TO A/C #1 THEN A/C #2 THE ATCS SOLICITED A HEADING FROM A/C #1 AND ISSUED A HEADING. UN FORTUNATELY THE ATCS ISSUED A TURN IN THE WRONG DIRECTION WHICH CAUSED A DECREASE IN LATERAL SEPARATION

For OE/D's involving ARTCC's, were either aircraft on NRP's? Yes  No   
Which Aircraft? #1  #2

(If additional space is needed, use page 2A.)

20. DATA REVIEWED:

- VOICE TAPE REVIEWED
- COMPUTER DATA REVIEWED

21A. PERSON MAKING NOTIFICATION:

TOM WHITHERS

21B. DATE (LOCAL):

1-6-97

21C. TIME (LOCAL):

1645

22. PERSON RECEIVING NOTIFICATION:

JANIS JOHNSON

## Appendix 3. Instructions For FAA Form 7210-3, Final Operational Error/Deviation Report

U / I BK

National Stock No. Automated; Available from each region's quality assurance staff.

### GENERAL INFORMATION

The Final Operational Error/Deviation Report (OE/OD), FAA Form 7210-3, has been designed to facilitate the gathering and documentation of factual information concerning the events which led to the occurrence of an operational error or deviation. It also provides a means of reporting the findings, recommendations, and conclusions of the facility manager and the regional ATD manager.

Situations may arise which are not adequately accounted for in Part I of this report. However, a careful analysis of the facts should usually establish a relationship to the information required in this report. If there are exceptions, when the information cannot be adequately expressed, or there is insufficient room to answer a question, use Block 64, Summary of Incident. Each comment should be prefaced with the block number to which it pertains.

An "\*" indicates that an explanation is required or may be required in Block 64, Summary of Incident.

### REPORT NUMBER

FAC ID - Enter the facility three-character identifier.

#### NOTE-

*NOTE: If the facility chargeable for the error/deviation is ARINC, enter "XXX" as the facility three-character identifier.*

TYPE - Enter the type of facility:

- "T" - Tower
- "R" - TRACON

#### NOTE-

*Use "R" for radar only facilities assigned a separate three-character identifier.*

- "C" - En Route
- "F" - Flight Service

#### NOTE-

*ZSU and ZHN should be entered as TRACON facilities and ZUA should be entered as an en route facility.*

CY - Enter the last two digits of the calendar year in which the incident occurred.

E/D - Enter "E" for error or "D" for deviation.

SEQ# - Enter the sequential number of the incident for the calendar year. Each calendar year operational errors will start with 001 and operational deviations will start with 001. For example, the facility's second operational error is 002 and the thirteenth would be 013. The facility's second operational deviation will be 002 and the thirteenth would be 013.

### PART I - Investigative Data

#### GENERAL INFORMATION

Part I provides for the documentation of the factual data which is gathered by the Investigator-In-Charge (IIC) and, when appointed, an investigation team.

#### Block 1 - DATE AND TIME OF INCIDENT

The time of an OE is the time that the loss of separation occurred. The time of an OD is the time that the airspace was violated.

DATE: Use the date based on the local date:  
EXAMPLE: May 4, 1996 would be entered as "05/04/1996."

TIME: Using the 24-hour clock, enter the local time of the incident.

EXAMPLE- 3:38 p.m. (Time of incident) would be entered as "1538."

#### Block 2 - RESPONSIBLE FACILITY AND CLASSIFICATION LEVEL

Responsible Facility: The three-letter identifier of the facility completing the report will be automatically entered in this block after the report number has been entered.

Classification Level: Enter the classification at the time of the incident of the facility completing the report. Valid entries are 1 through 5. This will be automatically printed for each incident after the initial facility information is entered in the automated program.

### \* Block 3 – WAS WEATHER A FACTOR IN THE INCIDENT?

If weather or conditions caused by weather were pertinent to the incident, select “Yes” and explain fully in Block 64, Summary of Incident.

For example, if thunderstorms caused an unexpected route deviation or icing affected the climb, of an aircraft that was involved in an OE/OD, at the time of the incident, select “Yes” and explain.

### Block 4 – ALTITUDE/FLIGHT LEVEL OF INCIDENT

IF INCIDENT HAPPENED	ENTER
On the surface	SFC
In the air	Enter an altitude above the surface to the nearest 100 feet omitting the last two digits.  Examples: 1 foot – 149 feet, enter “001” 750 feet, enter “008” 1150 feet, enter “012” 29,700 feet, enter “297”

### Block 5 – TYPE OF AIRSPACE

Select the type of airspace where the incident occurred, “Other” will require additional information.

### Block 6 – LOCATION OF INCIDENT

If the incident occurred in the air, complete FIX, DIRECTION, and DISTANCE unless the location is best described by latitude and longitude.

If the incident occurred on the surface, complete INTERSECTION, RUNWAY and TAXIWAY.

If the incident occurred in the air and is best described by latitude and longitude or in oceanic airspace, complete LATITUDE and LONGITUDE.

**FIX:** The fix provides a reference as to where the incident occurred. Enter a 3- or 5-letter location identifier whenever possible to clearly identify the fix.

**EXAMPLE–** Dryer VORTAC would be entered as “DJB.” NESTO intersection would be entered as “NESTO.”

**DIRECTION:** Use three digits to indicate the degrees of the radial or course from the NAVAID. If the fix used is an airport, intersection, or way point that does not have prescribed radials or a compass rose, use the 16 points of the compass to describe direction.

**EXAMPLE–** The 10 degree radial would be entered as “010.” North-Northeast would be entered as “NNE.”

**DISTANCE–** Specify the distance of the incident from the fix in nautical miles.

**EXAMPLE–** One nautical mile would be entered as “001.” Twenty nautical miles would be entered as “020.”

**INTERSECTION–** Enter the airport intersection closest to the incident.

**RUNWAY–** Enter the runway(s) closest to the incident. Use a “/” to separate runways that are not left, right, or center. Do not exceed 6 digits.

**EXAMPLE–** Runway 9 would be entered as “000009.” If the incident occurred at or near the intersection of runway 3 and runway 12, it should be entered as “003/12.” Runways 9L and 17R would be entered as “09L17R.”

**TAXIWAY–** If the taxiway is described using the phonetic alphabet, enter the letter not the word.

**EXAMPLE–** Echo would be “E” and HOTEL 1 would be “H1.”

### LATITUDE:

**EXAMPLE–** For 48 degrees 35 minutes NORTH, enter “N 48 30 0.”

### LONGITUDE:

**EXAMPLE–** For 153 degrees WEST, enter “W 153 0 0.”

### Block 7 – CLOSEST PROXIMITY

Complete this block for incidents in the air and on the surface.

For aircraft in flight, the closest proximity is expressed in lateral/longitudinal and vertical measurements. When separation is lost, determine the closest proximity as follows: Enter the smallest lateral/longitudinal distance that existed between the aircraft while separation was lost. Then, enter the vertical distance that existed between the aircraft at the time of that smallest lateral/longitudinal distance.

**EXAMPLE-** At one point two aircraft came within 2.8 miles and 400 feet of each other at the same time. The 400 feet was the smallest vertical distance between the aircraft during the incident. The same two aircraft continued their flight and came within 2.34 miles and 800 feet of each other at the same time; 2.34 miles being the smallest lateral distance between the aircraft during the incident. The proper entry would be "2.34" for lateral and "0800" for vertical.

For situations where lateral/longitudinal distance was constant, enter that constant lateral/longitudinal distance and the smallest vertical distance between the aircraft.

**EXAMPLE-** Two aircraft were 2 miles apart on parallel routes, one at seven thousand feet and one at six thousand feet. The aircraft at seven thousand feet was cleared to descend to five thousand feet. The vertical distance decreased until the aircraft were at the same altitude, then increased until the descending aircraft leveled at five thousand feet. Enter "2.00," which was the constant (and smallest) lateral distance between the aircraft and "0" which was the smallest vertical distance.

**VERTICAL-** Enter the vertical distance measured in feet.

**EXAMPLE-** One foot would be entered as "0001," 100 feet would be entered as "0100," and 1,000 feet would be entered as "1000."

**LATERAL-** Select "feet," "miles," "minutes," or "N/A" then enter the appropriate lateral distance.

**EXAMPLE-** Two thousand feet would be entered as "2000," 2.34 miles would be entered as "2.34," and 4 minutes would be entered as "4."

### **Block 8 – NUMBER OF AIRCRAFT FOR WHICH THE CONTROLLER HAD CONTROL RESPONSIBILITY AT THE TIME OF THE INCIDENT**

Enter the number of aircraft for which the controller had separation responsibility, including pointouts even though the aircraft may be on another frequency. For incidents involving tower cab local controllers, do not count aircraft waiting in line for departure unless the controller was responsible for their separation.

### **Block 9 – WAS TRAINING IN PROGRESS?**

Select "Yes" or "No" to indicate if, at the time of the incident, training was being conducted at the position where the incident took place.

**Blocks 10 through 35 shall be completed for each employee identified as primary or contributory to the incident.**

### **Block 10 – ENTER P FOR PRIMARY OR C FOR CONTRIBUTORY**

Indicate whether the employee was the primary cause of the incident or contributed to the incident by entering a "P" for primary or "C" for contributory. One employee should be designated as the primary employee responsible for the incident. If a facility is unable to identify one employee as primary, mark all employees with a "C" and include justification for the designation in Block 68, Facility Manager's Recommendations and Corrective Actions. Do not include employees who were receiving OJT at the time of the incident.

### **Block 11 – NUMBER OF PERSONNEL INVOLVED**

This is the total number of personnel involved in the error or deviation at the facility that completes this report. This number will be automatically inserted in this block depending on the number of employees for whom data is provided.

### **Block 12 – EMPLOYEE IDENTIFIER/FACILITY**

**EMPLOYEE IDENTIFIER:** This letter will be automatically placed in the block for each employee for whom data is provided.

**EMPLOYEE FACILITY IDENTIFICATION:**

Enter the three-letter identifier of the facility where the employee worked at the time of the incident.

**EMPLOYEE FACILITY LEVEL:** Select the classification level of the facility where the employee worked at the time of the incident. Select from levels 1 through 5.

**EMPLOYEE FACILITY TYPE:** Select the type of facility where the employee worked at the time of the incident. Select from, "CENTER," "FLIGHT SERVICE," "TOWER," "TRACON," or "OTHER."

**Block 13 – NAME OF EMPLOYEE**

Enter the last name, first name, and middle initial of the employee in the appropriate blocks.

**Block 14 – DATE OF BIRTH**

Enter the month, day, and year of the employee's birth.

EXAMPLE– A birth date of September 30, 1949 would be entered as "09/30/1949."

**Block 15 – SOCIAL SECURITY NUMBER**

Enter the last four numbers of the employee's social security number.

**Block 16 – INDICATE THE PERFORMANCE LEVEL OF THE EMPLOYEE**

Select the position or the performance level of the employee at the time of the incident. Select "DEVELOPMENTAL," "FPL," "SUPERVISOR," "STAFF SPECIALIST," or "OTHER."

If "FPL" is selected, enter, as of the date of the incident, how many years and months the employee has been an FPL in the facility where the incident occurred.

EXAMPLE– 5 years and 8 months would be entered as "05-08."

**Block 17 – LAST DATE OF CERTIFICATION OR RECERTIFICATION ON POSITION**

**DATE:** Enter the most recent of either the date that the employee was initially certified or the last date

that the employee was recertified on the position that he/she was staffing at the time of the incident.

EXAMPLE– A date of May 25, 1993 would be entered as "05/25/1993."

**CERTIFICATION:** Indicate whether the date entered is the initial certification date by selecting "I" or recertification by selecting "R."

**Block 18 – HAS TRAINING BEEN RECEIVED WITHIN THE LAST 12 MONTHS THAT IS RELEVANT TO THE INCIDENT?**

Select "Yes" or "No" to indicate whether the employee has received training within the 12 months prior to the incident that is relevant to the incident. If "Yes" is selected, list the type and date of the training in the provided text box.

**\* Block 19 – IS A MEDICAL CERTIFICATION ISSUE RELATED TO THE INCIDENT?**

Select "Yes" or "No" to indicate if a medical certification issue was related to the incident.

If "Yes" is selected, provide a complete explanation of how the medical certification issue related to the incident in Block 64, Summary of Incident.

**Block 20 – IDENTIFY AND DESCRIBE THE TYPE OF WORK SCHEDULE BEING WORKED AT THE TIME OF INCIDENT**

EXAMPLE– When the employee is on an alternate work schedule always enter "AWS" before describing the shift. For example, an AWS shift of eight 9 hour days and one 8 hour day per pay period would be entered as "AWS 5-4/9." An AWS shift working four 10 hour days per week would be entered as "AWS 4/10."

When the employee works 8 hour shifts; 2 days, 2 swings, 1 mid per week, enter "2-2-1." Explain any other schedules such as: "8 hour day shifts," "8 hour mid shifts," or "No standard operational work schedule, person on detail."

Supervisors, managers, or staff specialists who are maintaining currency but not working traffic full time should be described as: "First-level supervisor/area manager/air traffic manager/staff specialist maintaining currency."

**Block 21 – CURRENT AND PREVIOUS SHIFT**

Enter local times using the 24 hour clock.

**PREVIOUS SHIFT:** Enter the sign-in and sign-out times of the employee for the shift immediately prior to the shift on which the incident occurred. Enter these times **ONLY** if that shift ended less than 36 hours from the beginning of the shift on which the incident occurred. If the previous shift ended more than 36 hours before the shift on which the incident occurred, enter "N/A."

**CURRENT SHIFT:** Enter the sign-in and sign-out times for the employee for the shift on which the incident occurred.

#### **Block 22 - AREA OF SPECIALIZATION**

Enter the employee's area of specialization.

**EXAMPLE-** Area B, Tower, TRACON, South Area, Tower/TRACON.

#### **Block 23 - SECTOR OR POSITION**

Enter the sector or position that the employee was staffing at the time of the incident.

**EXAMPLE-** Sector 34, Blueridge Sector, BKW, Sector OC9, South Arrival Radar, Arrival Radar 1, Local Control One.

#### **Block 24 - TIME ON POSITION**

Enter the amount of time in minutes the employee had been on the position at the time of the incident.

#### **Block 25 - WHAT SECTORS OR POSITIONS WERE COMBINED AT THE POSITION BEING STAFFED BY THE CONTROLLER AT THE TIME OF THE INCIDENT?**

List any other sectors or positions that were combined at the sector or position that the controller was staffing at the time of the incident.

**EXAMPLE-** If the hand-off position of Sector 34 was combined at the radar position of Sector 34 that was being worked by the primary controller, enter "H34." If the North Feeder radar position was combined at the South Feeder radar position, enter "North Feeder Radar." A midnight watch would probably have several sectors/positions combined.

#### **Block 26 - WHICH ASSOCIATED POSITIONS WERE STAFFED AT THE TIME OF THE INCIDENT?**

List any associated positions that were staffed at the time of the incident. These are positions that directly work with or assist the position being worked by the primary controller.

**EXAMPLE-** If D34 was staffed at the time of incident when the primary controller was working R34, enter "D34." If the handoff position for Arrival Radar 1 was staffed, enter "Handoff Arrival Radar 1."

#### **Block 27 - POSITION FUNCTION**

Select the employee's position function **at the time** of the incident from the following choices. Area Supervisor, Radar, Handoff, Radar Associate, Local Control, Ground Control, Clearance Delivery, Departure Position, Arrival Position, Air Traffic Assistant, Traffic Management, Flight Data, or Other.

If "Other" is selected, enter that function in the appropriate space.

**EXAMPLE-** If the employee involved is an Area Supervisor but he/she was working a radar position at the time of the incident, enter "R." If the employee was a staff specialist working the Controller-In-Charge position, enter "CIC."

#### **\* Block 28 - DID THE EMPLOYEE REQUEST ASSISTANCE PRIOR TO THE INCIDENT?**

Select "Yes" or "No" to indicate if the employee requested assistance prior to the incident. If "Yes" is selected, provide an explanation of the request, to whom it was directed, any action or inaction that resulted based upon the request, etc., in the Block 64.

#### **\* Block 29 - WAS THE EMPLOYEE AWARE THAT AN OPERATIONAL ERROR/DEVIATION WAS DEVELOPING?**

Select "Yes" or "No" to indicate if the employee was aware that an OE/OD was developing. In either case, provide an explanation in Block 64. If "Yes" is selected, explain the surrounding circumstances in relation to when the employee was aware. If "No" is selected, explain why the employee was unaware.

**\* Block 30 – DID THE EMPLOYEE CONTEMPLATE TAKING CORRECTIVE ACTION?**

Select “Yes” or “No” to indicate if the employee contemplated taking any corrective actions regarding the incident. In either case, provide an explanation in Block 64. If “Yes” is selected, explain what the employee thought of doing to correct the situation. If “No” is selected, explain why the employee did not think of taking corrective action.

**\* Block 31 – DID THE EMPLOYEE ATTEMPT TO TAKE CORRECTIVE ACTION?**

Enter “Yes” or “No” to indicate if the employee attempted to take corrective action regarding the incident. In either case, provide an explanation in Block 64. If “Yes” is selected, explain what action was taken. If “No” is selected, explain why no corrective action was attempted.

**Block 32 – EMPLOYEE WAS ALERTED TO THE INCIDENT BY**

Enter the first source that alerted the employee of the incident by selecting one of the following: Conflict Alert, MSAW/EMSAW, Self-identified, Facility Personnel, Pilot, Another Facility, or Other. If “Other” is selected, describe the source in the appropriate space.

**Block 33 – DATE AND TIME EMPLOYEE BECAME AWARE OF THE INCIDENT**

Using the 24-hour clock, indicate the local date and time the employee became aware of the incident. This date and time should reflect when the employee actually became aware that an incident occurred even if it was not clear at the time that the incident was an error or deviation.

**Block 34 – WAS THE DISTANCE REFERENCE (I.E., THE J-RING ) BEING USED?**

This block applies only to ARTCC’s. Select “Yes” or “No” to indicate if, at the time of the incident, the “J-ring” (HALO) was being used on at least one aircraft involved in the incident.

**\* Block 35 – WERE THERE ANY DISTRACTIONS OR ENVIRONMENTAL CONDITIONS THAT MAY HAVE INFLUENCED THE INCIDENT?**

Select “Yes” or “No.” If “Yes” is selected, explain in Block 64. The explanation may include reference to conditions such as: construction, equipment installation, presence of visitors, loud or boisterous co-workers, equipment malfunction, or extraneous conversation with co-workers or Environmental: ambient air, work area layout, temperature, noise, or lighting.

**Block 36 – NAME THE ASIC/CIC ASSIGNED AT THE TIME OF THE INCIDENT**

Enter the last name, first name, and middle initial of the employee assigned as the Area Supervisor-in-Charge (ASIC)/CIC of the operational area, at the time of the incident.

**\* Block 37 – WAS THE ASSIGNED ASIC/CIC PRESENT IN THE OPERATIONAL AREA AT THE TIME OF THE INCIDENT?**

Select “Yes” or “No” to indicate if the ASIC/CIC was present in the operational area at the time of the incident. If “No” is selected, provide an explanation in Block 64.

**Block 38 – DID THE EMPLOYEE REQUIRE ASIC/CIC ASSISTANCE PRIOR TO THE INCIDENT?**

This block should be completed using input from the ASIC/CIC assigned to the operational area, at the time of the incident.

Select “Yes” or “No” to indicate if assistance that is normally provided by the ASIC/CIC could have helped the employee to prevent the incident.

**\* Block 39 – DID THE ASSIGNED ASIC/CIC PROVIDE ASSISTANCE?**

Select “Yes” or “No” to indicate if the assigned ASIC/CIC provided assistance to the employee that was pertinent to the incident. If “Yes” is selected, explain in Block 64 what assistance was provided. If “No” is selected, explain in Block 64 why assistance pertinent to the incident was not provided by the ASIC/CIC.

**Block 40 – IF SECTORS WERE COMBINED, DID THE ASIC/CIC APPROVE THE COMBINATION?**

For those facilities that have sectors, select “NOT COMBINED,” “NO,” or “YES” as appropriate.

For those facilities that do not have sectors, select “N/A.”

**Block 41 – IF POSITIONS WERE COMBINED, DID THE ASIC/CIC APPROVE THE COMBINATION?**

Select “NOT COMBINED,” “YES,” or “NO,” to describe the combination of positions.

**Block 42 – IN WHAT ACTIVITY WAS THE ASSIGNED ASIC/CIC ENGAGED AT THE TIME OF THE INCIDENT?**

Select the activity that most describes what the ASIC/CIC assigned to supervise the operation was doing at the time of the incident. If “Other” is selected, describe the activity as briefly as possible.

“General Supervision” means the ASIC/CIC was not engaged in direct operational supervision at the time of the incident. However, he/she was in the area, perhaps dealing with paperwork, phone calls, weather displays, equipment matters, etc.

“Direct operational supervision” means the ASIC/CIC was observing control positions and providing guidance and/or direction to controllers.

**Block 43 – WAS THE ASIC CERTIFIED IN THE AREA OF SPECIALIZATION WHERE THE INCIDENT TOOK PLACE?**

If an ASIC was assigned, at the time of the incident, to supervise the area of operation where the incident took place, select either “Yes”, “No.” A selection of “Yes” means that the ASIC was certified to work at least one operational control position in the area of specialization, at the time of the incident.

If “No” is selected, provide an explanation in this block of why the assigned ASIC was not certified to work at least one operational control position in the area of specialization, at the time of the incident.

Select “N/A” if an ASIC was not assigned, at the time of the incident, to supervise the area of operation where the incident took place.

**Block 44 – TRAFFIC COMPLEXITY**

Select 1 through 5 on the scale to indicate the level of traffic complexity at the time of the incident. One indicates a low level of complexity, 3 indicates an average level of complexity, 5 indicates a high level of complexity.

When determining the traffic complexity, consider the overall difficulty of the controller’s task; e.g. weather, variety of aircraft, traffic volume, coordination requirements, runway configuration, emergency situations, arrival/departure flows, etc.

**\* Block 45 – INDICATE WHICH FACTOR(S) WERE ASSOCIATED WITH TRAFFIC COMPLEXITY**

Select the factor(s) that determined the level of traffic complexity at the time of the incident. If any of the factors were pertinent to the incident, provide an explanation in Block 64.

**Block 46 – TYPE OF CONTROL PROVIDED**

Select the type of control that was being provided at the position at the time of the incident. Select “RADAR,” “TOWER,” “OCEANIC,” or “NONRADAR.”

**Block 47 – REQUIRED SEPARATION WAS BY**

Select the appropriate document that specified the required separation concerning the incident. Select either “FAA ORDER,” or “FACILITY LETTER OF AGREEMENT OR DIRECTIVE.”

If “FAA ORDER” is selected, enter the order number and applicable paragraph number.

If “FACILITY LETTER OF AGREEMENT OR DIRECTIVE” is selected, enter the facility with which the LOA has been negotiated or the facility directive and paragraph numbers.

**Block 48 – WERE ANY DEFICIENT PROCEDURES NOTED AS A RESULT OF THE INCIDENT?**

Select “Yes” or “No” to indicate if any national, regional, or local procedures were found to be

deficient as a result of the incident. If "Yes" is selected, provide an explanation in this block.

**Block 49 – WERE ANY SPECIAL PROCEDURES IN EFFECT AT THE TIME OF THE INCIDENT?**

Select "Yes" or "No" to indicate if any pertinent special procedures were in effect at the time of the incident. If "Yes" is selected, provide an explanation in this block.

For example, if a special military operation was pertinent to the incident, identify the operation and explain how it was pertinent. If unusual runway or airspace configurations were pertinent to the incident, describe those configurations and explain their pertinent relationship to the incident.

**Block 50 – NUMBER OF AIRCRAFT INVOLVED IN THE INCIDENT**

This number will automatically be entered as data for each aircraft is entered.

**Blocks 51 through 57 shall be completed for each aircraft/vehicle identified as involved in the incident.**

**Block 51 – IDENTIFICATION**

Enter the aircraft identity using combinations not to exceed 7 alphanumeric characters

**Block 52 – PREFIX/TYPE/SUFFIX**

Enter the aircraft prefix/type/suffix using combinations not to exceed 9 alphanumerics.

EXAMPLE– A heavy Boeing 747 with TCAS, RNAV, and a transponder with altitude encoding capability would be entered as "B/B747/R."

**Block 53 – FLIGHT PROFILE OR VEHICLE POSITION AT TIME OF INCIDENT**

Select the flight profile that best describes the aircraft before the incident. This should be the profile that was in effect before any action was taken to resolve the potential incident.

For example, an aircraft was in level flight when the controller saw the potential confliction. The controller then climbed the aircraft to maintain separation, but that action was not enough and separation was lost. Select "LEVEL FLIGHT" in this block for this scenario. The same would apply to vectors given to resolve the situation.

Select "OTHER" if the most appropriate profile is not listed and describe that profile in the text field. When more than one of the profile choices applies, make one selection then select "OTHER" and describe the other profile(s) in the text field.

**Block 54 – AIRCRAFT GROUND SPEED**

Enter the aircraft ground speed, in knots, at the time of the incident. Select "N/A" if the aircraft was on the ground at the time of the incident.

**Block 55 – TCAS EQUIPPED**

Select "Yes", "No", or "Unknown" to indicate if the aircraft was equipped with an operating TCAS at the time of the incident.

**Block 56 – EVASIVE ACTION**

Select "Yes", "No", or "Unknown" to indicate if the aircraft took any evasive action with regard to the incident. Chose "TCAS" if a pilot responded to a resolution advisory and climbed or descended.

EXAMPLE– An aircraft inadvertently vectored close to another aircraft at the same altitude turns out of the path of that aircraft.

**Block 57 – DID THE PILOT FILE A NEAR MIDAIR COLLISION REPORT?**

Select "Yes", "No", or "Unknown" to indicate if the pilot filed a near midair collision report.

**Block 58 – AIRCRAFT AND OBSTRUCTION/OBSTACLES**

If the incident involved aircraft and an obstruction or obstacle that contributed to the cause of the incident, select the appropriate item. If "Airport Movement Area" or "Other" is selected, explain in the text field.

**\* Block 59 – WAS EQUIPMENT LAYOUT OR DESIGN A FACTOR IN THE INCIDENT?**

Select “Yes” or “No” to indicate if equipment layout or design influenced the incident. If “Yes” is selected, provide an explanation in Block 64.

**\* Block 60 – WAS ANY PERTINENT EQUIPMENT OPERATED BY THE CONTROLLER(S) REPORTED AS FUNCTIONING UNSATISFACTORILY BEFORE THE INCIDENT?**

Select “Yes” or “No” to indicate if any problems with pertinent equipment were reported by the controller prior to the incident. These are problems with equipment that existed before and during the incident. If “Yes” is selected, provide an explanation in Block 64.

**Block 61 – SYSTEM(S) IN USE**

Select the system(s) in use at the position where the incident occurred at the time of the incident.

**Block 62 – WAS RADAR TRANSITION FROM ONE SYSTEM TO ANOTHER IN PROGRESS?**

Select “Yes” or “No” to indicate if a radar transition from one system to another was in progress at the time of the incident. If “Yes” is selected, explain the circumstances of the transition in this block.

**Block 63 – WHAT WAS THE STATUS OF THE CONFLICT ALERT AT THE TIME OF THE INCIDENT?**

Select the status that best describes the status of the conflict alert feature at the position where the incident occurred at the time of the incident.

**Block 64 – SUMMARY OF INCIDENT**

Explain, in chronological order, each factor relevant to the incident.

Tell a detailed story, describing the pertinent actions of all those involved (e.g. controllers by position, supervisors, aircraft, etc.). It should be apparent what actions (or lack of) contributed to or caused the incident. Include any explanations necessary from previous blocks.

Refer to aircraft using their callsigns and to individuals by position or title, as appropriate. For example, use “UAL1065” instead of “Aircraft #1.” Use “R34” or “Local Control” instead of “Controller A.” The summary should be complete so that the reader does not have to refer back to other blocks for information on controller positions, aircraft identifications, etc.

Reference specific times only when it is necessary to better describe the order of events. Use local times so the reader can better understand the time of day the events took place.

End the summary with a short (usually 4–5 lines) recap of the specific reasons the incident occurred. Explain why the controller did not maintain separation.

**EXAMPLE–**

a. The controller may have been focusing on another situation and when he/she noticed the potential incident it was too late to maintain separation.

b. The controller issued a clearance but by the time he/she noticed the aircraft was not complying fast enough it was too late to maintain separation.

c. A readback/hearback error occurred and the controller did not have enough time to issue the correct clearances to maintain separation.

d. The controller thought the heading/climb/descent he/she gave an aircraft would maintain separation but by the time it was apparent that separation would be lost, it was too late for more effective instructions to take effect.

e. Equipment failure did not allow the controller to issue the necessary timely instructions.

f. An authorized local/regional/national procedures was followed correctly but an OE/OD still resulted.

**NOTE–**

*A phrase such as “The controller failed to establish vertical separation before lateral separation was lost” is not appropriate. It is a factual statement but it does not describe the specific circumstances surrounding the incident or why the controller failed to maintain separation.*

**Block 64 – SUMMARY OF INCIDENT  
EXAMPLE**

AAL1045, B757, was eastbound at FL290 from over LIN direct OAL en route to JFK and in

communication with R25. UAL432, DC10, was westbound at FL350 from approximately over OAL direct MOD, en route to SFO, and in communication with R12. The aircraft were on approximately opposite direction courses.

At 0923:15, R12 accepted the hand-off on AAL1045 and requested D12 to coordinate with Sector 25 to assign AAL1045 a heading of 120 degrees and to climb the aircraft to FL370. D12 then contacted R25 with the requests and R25 issued AAL1045 the coordinated clearances. The pilot acknowledged both the heading and the altitude clearance.

At 0924:05 the R25 controller requested help at the sector due to traffic volume (15 aircraft and increasing) and flow restrictions, due to weather, requiring a 20 mile-in-trail restriction for aircraft landing SFO. The ASIC had a controller working on the "D" position at Sector 25 within 3 minutes of the request.

At 0925:30, R25 accepted the hand-off on UAL432 which was converging with AAL1045. The DART data showed that AAL1045's altitude was FL316. The aircraft were 72 miles apart.

At 0927:50, the R25 controller generated a HALO around UAL432 radar target and, simultaneously, the Conflict Alert activated. Three seconds later UAL432 made initial contact with R25, at FL350. Lateral separation was then 39 miles with AAL1045 climbing through FL342. Immediately following UAL432's initial contact, the R25 controller issued UAL432 a 20 degree right turn. The pilot acknowledged.

At 0928:05, the R25 controller issued AAL1045 a right turn to heading 140 degrees and asked the pilot to "give me a good rate of climb". The pilot acknowledged. The R25 controller then returned to UAL432 and issued a right turn to 310 degrees and the pilot acknowledged. The R25 controller thought that the vectors given were adequate to maintain lateral separation so that AAL1045 could continue to climb through the altitude of UAL432. Approximately 20 seconds passed and at 0928:45 the R25 controller asked UAL432 if he had started his turn. The pilot's response was, "We see the traffic out in front of us." The R25 controller stated that he needed UAL432 to start the turn "immediately." The pilot stated that he was

turning and passing through "three zero". Though not yet evident to the R25 controller, the turn had been started at or before 0928:40, as indicated by NTAP data.

At 0929:04 separation was lost. The NTAP indicated 3.9 miles lateral and 200 feet vertical separation as the closest proximity.

Although the R25 controller accepted a handoff on UAL432 knowing of the route convergence with AAL1045, he thought that AAL1045's initial vector and the 310 degrees heading he assigned to UAL432 would maintain separation. He could have amended AAL1045's altitude to FL330 during the climb to maintain vertical separation or could have given sharper turns to both aircraft to achieve lateral separation. By the time he recognized that the vectors were not working, it was too late to maintain separation.

#### **Block 65 - INVESTIGATORS**

Enter the dates the investigators reviewed the report. Investigators shall sign in the appropriate places to indicate they have reviewed the completed report.

Entering a date in the appropriate space will cause a "/s/" to be automatically entered in the associated signature space when printed.

The page with the original signature(s) shall be retained at the facility with the rest of the report. Copies of this page may contain a copy of the signature(s) or an "/s/" in the signature space(s).

#### **PART II - Facility Manager Action**

##### **GENERAL INFORMATION**

The facility manager's signature indicates that he/she has reviewed and concurs with the data submitted by the IIC and the investigative team (if applicable), and is satisfied that Part I of the final report is complete and sufficient to determine the following:

- a. The determination that the incident is an operational error or operational deviation.
- b. The category(ies) of the operational error/deviation and the reasons for category determination.
- c. Recommendations and actions to be taken to prevent a recurrence of the incident.
- d. The causal factor(s) of the incident.

## Block 66 – SELECT THE CATEGORY OF THE OPERATIONAL ERROR/DEVIATION

Select the category or categories that best describe(s) the cause(s) of the incident.

Select “ATCS” if one or more of the following is identified as either a causal or contributing factor:

a. An ATCS fails to adhere to procedures in or acts according to an individual misinterpretation of Orders 7110.65, 7110.10, or supplemental instructions.

b. An ATCS demonstrates substandard performance not covered in a, above.

Select “MANAGER/SUPERVISOR/OTHER PERSONNEL” when an action or inaction of a manager(s), supervisor(s), or other personnel is identified as a causal factor or a contributing factor to the incident.

### NOTE–

*This category should not be used for an OE/D involving a manager, supervisor, or other personnel performing regular ATCS duties, e.g., working an operational position for shift coverage, or currency time. Such incidents should instead be categorized as “ATCS.”*

Select “PROCEDURAL” if an established procedure was the primary cause or contributed significantly to the cause(s) of the incident.

Select “EQUIPMENT” if equipment failure was the primary cause or contributed significantly to the cause(s) of incident.

## Block 67 – CAUSAL FACTORS

Under each column designated for a specific employee, select any box so that an “X” appears, when the description identifies a causal factor of the incident.

EXAMPLE– If overlapping data blocks were a causal factor of the incident and it was employee “A” who was associated with the overlapping data blocks, select the box in column “A” under section B(1) entitled “Overlapping data blocks.” If a causal factor of the incident was the employee’s failure to coordinate correctly with a position within the same sector, select the box on the line in sector E(1) entitled “Intra–position.”

If “Other” is selected, in any section and more room is needed for the explanation, use Block 64, Incident of Summary.

## SECTION A: DATA POSTING

A data posting error is any error of calculation, omission, or incomplete data, erroneous entries, handling, or subsequent revisions to this data. This includes errors in posting and recording data. It does not include errors involved in receiving, transmitting, coordinating, or otherwise forwarding this information. If one of the causal factors listed does not adequately describe the factor involved, list the factor under “Other” and provide a brief explanation.

## SECTION B: RADAR DISPLAY

### a. Misidentification

Radar misidentification means a failure to properly identify the correct target and includes subsequent errors committed after the original identification was properly accomplished. Indicate the listed item(s) which most closely describes the reason for misidentification. If one of the causal factors listed does not adequately describe the factor involved, list the factor under “Other” and provide a brief explanation.

### b. Inappropriate Use of Displayed Data

A data or display information error occurs due to a failure to maintain constant surveillance of a flight data display or traffic situation and to properly use the information presented by the display or situation. If one of the causal factors listed does not adequately describe the factor involved, list the factor under “Other” and provide a brief explanation.

## SECTION C: AIRCRAFT OBSERVATION (Towers Only)

An aircraft observation error means a failure to maintain constant surveillance of aircraft and the movement area, and to properly react to, interpret, or otherwise utilize, in a timely manner, the information being viewed. If one of the causal factors listed does not adequately describe the factor involved, list the factor under “Other” and provide a brief explanation.

## SECTION D: COMMUNICATIONS ERROR

A communications error is a causal factor associated with the exchange of information between two or more people (e.g., pilots and

specialists). It refers to the failure of human communication not communications equipment.

**a. Phraseology**

Use of incorrect or improper phraseology.

**b. Transposition**

Errors due to transposition of words, numbers, or symbols by either oral or written means. This involves writing/saying one thing while thinking/hearing something else.

**c. Misunderstanding**

The failure to communicate clearly and concisely so that no misunderstanding exists for any actions contemplated or agreed upon.

**d. Readback**

The failure to identify improper or incorrect readback of information.

**e. Acknowledgment**

The failure to obtain or give an acknowledgment for the receipt of information.

**f. Other**

If the causal factors listed above do not adequately describe the factor involved, list the factor and provide a brief explanation.

**SECTION E: COORDINATION**

Any factor associated with a failure to exchange requirement information. This includes coordination between individuals, positions of operation, and facilities for exchange of information such as APREQ's, position reports, forwarding of flight data, etc. If one of the causal factors listed does not adequately describe the factor involved, list the factor under "Other" and provide a brief explanation.

**SECTION F: POSITION RELIEF BRIEFING**

Relief briefing errors are special errors of both communication and coordination which occur as the result of position relief. They include such things as failure to give a relief briefing, failure to request a briefing, incomplete or erroneous briefing, etc. If one of the causal factors listed does not adequately describe the factor involved, list

the factor under "Other" and provide a brief explanation.

**Block 68 – FACILITY MANAGER'S RECOMMENDATIONS AND CORRECTIVE ACTIONS**

List recommendations and/or corrective actions that have been taken or will be taken to prevent a recurrence of a similar OE or OD.

The facility manager should address any written comments from the involved employees or the bargaining unit in this block.

The facility manager may use this block to explain the rationale behind any decisions or to comment on any part(s) of the investigation.

Record the local date (month/day/year) in the appropriate space that the facility manager, or his/her authorized representative, signed the report. Print or type the name of the facility manager in the appropriate space. The facility manager, or his/her authorized representative, shall sign in the appropriate space.

Entering a date in the appropriate space will cause a "/s/" to be automatically entered in the signature space when printed.

The page with the original signature shall be retained at the facility with the rest of the report. Copies of this page may contain a copy of the signature or an "/s/" in the signature space.

**PART III – Air Traffic Division Manager**

**Block 69 – DIVISION MANAGER'S CONCLUSIONS AND RECOMMENDATIONS**

If the ATD manager concurs with the recommendations and corrective actions taken by the facility manager, select the box at the top of the block so that an "X" appears in the box next to the sentence "We concur with the recommendations and corrective actions of the facility manager."

If the ATD manager does not concur with the recommendations and corrective actions taken by the facility manager, describe the differences of opinions.

Record the local date (month/day/year) in the appropriate space that the division manager, or his/her authorized representative, signed the

report. Print or type the name of the division manager in the appropriate space. The division manager, or his/her authorized representative, shall sign in the appropriate space.

Entering a date in the appropriate space will cause

a “/s/” to be automatically entered in the signature space when printed.

The page with the original signature shall be retained at the division with the rest of the report. Copies of this page may contain a copy of the signature or an “/s/” in the signature space.



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19. Is a medical certification issue related to the incident? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If yes, explain in the incident summary.)		20. Identify and describe the type of work schedule being worked at the time of the incident. 2-2-1 _____ _____ _____ _____		21. Current and previous shift: <table border="1"> <tr> <td>Previous Shift Sign In</td> <td>Sign Out</td> </tr> <tr> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>Current Shift Sign In</td> <td>Sign Out</td> </tr> <tr> <td>1300</td> <td>2200</td> </tr> </table>		Previous Shift Sign In	Sign Out	N/A	N/A	Current Shift Sign In	Sign Out	1300	2200
Previous Shift Sign In	Sign Out												
N/A	N/A												
Current Shift Sign In	Sign Out												
1300	2200												
22. Area of specialization:  Area B	23. Sector or position:  R101	24. Time on position:  27 Minutes	25. What sectors or positions were combined at the position being staffed by the controller at the time of the incident?  R102										
26. Which associated positions were staffed at the time of the incident? A101													
27. Position function: <input checked="" type="checkbox"/> Radar <input type="checkbox"/> Radar Associate <input type="checkbox"/> Hand Off <input type="checkbox"/> Local Control <input type="checkbox"/> Ground Control <input type="checkbox"/> Flight Data <input type="checkbox"/> Clearance Delivery <input type="checkbox"/> Departure Position <input type="checkbox"/> Arrival Position <input type="checkbox"/> Area Supervisor <input type="checkbox"/> Traffic Management <input type="checkbox"/> Air Traffic Assistant <input type="checkbox"/> Other:													
28. Did the employee request assistance prior to the incident?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If yes, provide an explanation in the incident summary.)			29. Was the employee aware that an operational error/deviation was developing?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Provide an explanation in the incident summary.)										
30. Did the employee contemplate taking corrective action?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Provide an explanation in the incident summary.)			31. Did the employee attempt to take corrective action?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Provide an explanation in the incident summary.)										
32. Employee was alerted to the incident by:  Equipment:    Personnel:    Non-Facility Personnel: <input type="checkbox"/> Other: <input checked="" type="checkbox"/> Conflict Alert <input type="checkbox"/> Self-Identified <input type="checkbox"/> Pilot <input type="checkbox"/> MSAW/EMSAW <input type="checkbox"/> Facility Personnel <input type="checkbox"/> Another Facility													
33. Date and time employee became aware of the incident:  01/08/1997    1440 MM/DD/YYYY    Time (local)			34. Was the Distance Reference Indicator (i.e., J-Ring) being used?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No										
35. Were there any distractions or environmental conditions that may have influenced the incident?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No    (If yes, provide an explanation in the incident summary.)													

Final Operational Error/Deviation Report

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<p>36. Name the ASIC/CIC assigned at the time of the incident:</p> <p><u>  A  </u> Enter A for ASIC Enter C for CIC</p> <p>Smith _____ Honor _____ I _____ 4430 Last Name First Name MI SSN(Last 4 digits)</p>	<p>37. Was the assigned ASIC/CIC present in the operational area at the time of the incident?</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>38. Did the employee require ASIC/CIC assistance prior to the incident?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>39. Did the assigned ASIC/CIC provide assistance?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Provide an explanation in the incident summary.)</p>
<p>40. If sectors were combined, did an ASIC/CIC approve the combination?</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Combined <input type="checkbox"/> N/A</p>	<p>41. If positions were combined, did an ASIC/CIC approve the combination?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Combined</p>
<p>42. In what activity was the assigned ASIC/CIC engaged at the time of the incident?</p> <p><input checked="" type="checkbox"/> General Supervision <input type="checkbox"/> Administering Training  <input type="checkbox"/> Direct Operational Supervision <input type="checkbox"/> Receiving Training  <input type="checkbox"/> Working a Position of Operation <input type="checkbox"/> Other _____</p>	<p>43. Was the ASIC/CIC certified in the area of specialization where the incident took place?</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A (If no, explain here)</p>
<p>44. Traffic Complexity:</p> <p>1    2    4    5 Low    Average    High</p> <p style="text-align: center;">●</p>	<p>45. Indicate which factor(s) caused an increase in traffic complexity:</p> <p><input type="checkbox"/> Weather <input type="checkbox"/> Runway Configuration  <input type="checkbox"/> Terrain <input type="checkbox"/> Runway Condition  <input type="checkbox"/> Airspace Configuration <input type="checkbox"/> Traffic Management  <input checked="" type="checkbox"/> Number of Aircraft <input type="checkbox"/> Special Event  <input type="checkbox"/> Experience Level <input type="checkbox"/> Other:  <input type="checkbox"/> Emergency Situation</p> <p style="text-align: center;"><input type="checkbox"/> N/A (If pertinent to the incident, explain in the incident summary.)</p>
<p>46. Type of control provided:</p> <p><input checked="" type="checkbox"/> Radar  <input type="checkbox"/> Tower  <input type="checkbox"/> Oceanic  <input type="checkbox"/> Nonradar</p>	<p>47. Required separation was by:</p> <p><input checked="" type="checkbox"/> FAA Order  <input type="checkbox"/> Facility Letter of Agreement (LOA) or Directive</p> <p>FAA Order <u>7110.65</u> Facility LOA/Directive _____  Paragraph <u>5-5-3:b1</u> Paragraph _____</p>
<p>48. Were any deficient procedures noted as a result of the incident?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If yes, explain here.)</p>	<p>49. Were any special procedures in effect at the time of the incident? (e.g., Traffic Management Program)</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If yes, explain here.)</p>

## Final Operational Error/Deviation Report

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(Completes additional sections if more than two aircraft are involved)		
50. Number of aircraft involved in the incident: <u>2</u>		
	Aircraft No. 1	Aircraft No. 2
51. Identification	N1234	N333LB
52. Prefix/type/suffix	LR55/R	BE20/R
53. Flight profile or vehicle position at time of incident	<input checked="" type="checkbox"/> Descending <input type="checkbox"/> Making Approach <input type="checkbox"/> Touching Down <input type="checkbox"/> Radar Vector <input type="checkbox"/> Level Flight <input type="checkbox"/> Takeoff Roll <input type="checkbox"/> Taxiing-runway <input type="checkbox"/> Landing Roll <input type="checkbox"/> Climbing <input type="checkbox"/> Holding in position on runway <input type="checkbox"/> Other _____	<input type="checkbox"/> Descending <input type="checkbox"/> Making Approach <input type="checkbox"/> Touching Down <input type="checkbox"/> Radar Vector <input checked="" type="checkbox"/> Level Flight <input type="checkbox"/> Takeoff Roll <input type="checkbox"/> Taxiing-runway <input type="checkbox"/> Landing Roll <input type="checkbox"/> Climbing <input type="checkbox"/> Holding in position on runway <input type="checkbox"/> Other _____
54. Aircraft ground speed	<input type="checkbox"/> N/A <u>450</u> knots	<input type="checkbox"/> N/A <u>250</u> knots
55. TCAS equipped	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
56. Evasive action	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> TCAS <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> TCAS <input type="checkbox"/> Unknown
57. Did the pilot file a Near Midair Collision Report?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
58. Aircraft and obstructions/obstacles _____ Terrain    _____ Vehicle(s)    _____ Personnel    _____ Obstruction    _____ Equipment    _____ Protected Airspace _____ Airport Movement Area (Explain) <input checked="" type="checkbox"/> Not Applicable    _____ Other (Explain) _____ _____ _____		
59. Was equipment layout or design a factor in the incident? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No    (If yes, explain in the incident summary)		60. Was any pertinent equipment operated by the controller(s) reported as functioning unsatisfactorily before the incident? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No    (If yes, explain in the incident-summary)
61. System(s) in use: <input checked="" type="checkbox"/> Narrowband <input type="checkbox"/> MODE S <input type="checkbox"/> ARTS IIA <input type="checkbox"/> ARTS IIIA <input type="checkbox"/> ARTS IIIE <input type="checkbox"/> DARC <input type="checkbox"/> ASDE II <input type="checkbox"/> ASDE III <input type="checkbox"/> D-BRITE <input type="checkbox"/> BRITE IV <input type="checkbox"/> Broadband <input type="checkbox"/> EARTS <input type="checkbox"/> ASR-9 <input type="checkbox"/> CENRAP <input type="checkbox"/> Other: _____		
62. Was radar transition from one system to another in progress? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No    (If yes, explain here)		63. What was the status of the conflict alert at the time of the incident? <input checked="" type="checkbox"/> Activated <input type="checkbox"/> Not Available <input type="checkbox"/> Not Activated  <input type="checkbox"/> Not Installed <input type="checkbox"/> Suppressed

## Final Operational Error/Deviation Report

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## 64. SUMMARY OF INCIDENT

Blocks 29/30/31 - The employee was aware that both aircraft were in conflict and had issued radar vectors to ensure separation.

Block 39 - The Operations Supervisor had not provided assistance, since traffic was light and none was requested by the specialist.

Block 45 - The weather was VFR, and the traffic complexity was light.

All Times UTC

1437:21 - N1234 (Acrft. #1) checked on the frequency level at FL290.

1437:30 - Employee requested aircraft #1 to descend at a "good rate down to FL240...in ah three minutes or less." Pilot acknowledged clearance.

1437:51 - Employee issued aircraft #1 a 30 degree turn to the right for descent.

1438:09 - Employee instructed aircraft #1 to descend to FL230 with a request for "a good rate down."

1438:19 - Employee asked aircraft #1 his heading and was told 070 degrees.

1438:26 - Employee issued aircraft #1 a 60 degree heading.

1438:49 - The employee issued aircraft #2 a 15 degree turn to the right.

1439:20 - An additional 30 degree turn to the right is issued to aircraft #2.

1439:55 - ORDP shows a loss of separation between aircraft #1 and #2.

1440:45 - Aircraft #2 is assigned a heading of 090 degrees and a descent to FL220.

1440:48 - Aircraft #1 is cleared direct Timko.

1440:45 - Aircraft #1 was issued a heading of 270 degrees.

1441:41 - Aircraft #2 reports level at FL220.

Aircraft #2, an over flight to Blubert was southwest bound level at FL230, the "wrong" altitude for direction of flight. The reason for this was that the aircraft's flight path would pass over an active restricted area. Aircraft #2's altitude was approved by the receiving facility (ZXE). Aircraft #1 was inbound to Colver, heading north northeast bound level at FL290.

The ATCS descended aircraft #1 initially to FL240 and requested "a good rate down" from the pilot. The ATCS then instructed aircraft #1 to turn 30 degrees to the right of course and to continue the descent to FL230 again asking for, "a good rate down". The ATCS then asked the pilot what his heading was, and after being told "070", instructed the pilot to fly heading 060. This heading actually decreased separation and when the ATCS recognized this, instructed aircraft #2 to turn 15 degrees to the right. Thirty seconds later, the ATCS assigned aircraft #2 an additional turn of 30 degrees, but separation had been lost. The ATCS then assigned aircraft #1 a 90 degree heading and an altitude of FL220.

## Final Operational Error/Deviation Report

Report Number AAT-O-97-E-002

## SUMMARY OF INCIDENT (Continued)

The Operations Supervisor (OS) became aware of the developing problem when the Sector conflict alert was activated. The OS observed both aircraft within 20-25 miles apart, converging, and questioned the ATCS about the aircraft. The ATCS assured the OS that the situation was under control. Since it appeared that a conflict was pending, the OS again questioned the ATCS and again the ATCS said that the conflict had been corrected. The conflict alert was activated because the ATCS had removed the interim altitude (FL240), which then displayed FL230 in the full data block, the same altitude as aircraft #2. This was done to ensure a timely hand-off to the receiving sector. Even though the ATCS had issued vectors to both aircraft, the action was insufficient to maintain separation.

The ATCS later stated that when it was realized that aircraft #1's heading was 70 degrees, the intention was to increase the heading by 10 degrees to ensure separation however, the assigned heading was misstated as 60 degrees which eventually caused the loss of separation, as the mistake was not realized until it was too late.

Also noted during the course of the investigation was the ATCS's failure to accomplish any strip marking on the FPS (no heading or altitude assignments). Had control instructions/information been available on the FPS and kept up to date, the ATCS would have had a cross-reference which perhaps could have helped prevent the error.

Additionally, the ATCS used the phrase, "good rate down...in ah 3 minutes or less" on several occasions. FAA Order 7110.65J paragraph 4-5-7b requires any instruction to climb or descend which includes a restriction in time (minutes) to be issued for a specific time reference to UTC time and include a time check.

## 65. INVESTIGATORS

Date	Typed/Printed Name	Signature
<u>01/08/1997</u> MM-DD-YYYY	<u>Manny Compaigne</u> First/Last Name	<u>/s/</u> Investigator-In-Charge
<u>01/08/1997</u> MM-DD-YYYY	<u>Bill Williams</u> First/Last Name	<u>/s/</u> Team Member
<u>01/08/1997</u> MM-DD-YYYY	<u>Constance Hepplewyte</u> First/Last Name	<u>/s/</u> Team Member
<u>MM-DD-YYYY</u>	<u>First/Last Name</u>	<u>Team Member</u>
<u>MM-DD-YYYY</u>	<u>First/Last Name</u>	<u>Team Member</u>
<u>MM-DD-YYYY</u>	<u>First/Last Name</u>	<u>Team Member</u>

Final Operational Error/Deviation Report

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PART II. FACILITY MANAGER ACTION

66. Select the category of the operational error/deviation. (More than one category may be possible)						
<input type="checkbox"/> Procedural <input type="checkbox"/> Equipment <input checked="" type="checkbox"/> ATCS <input type="checkbox"/> Manager/Supervisor/Other Personnel						
67. Causal Factors	No	Yes (Employee)				
		A	B	C	D	E
<b>A. Data Posting</b>						
(1) Computer Entry	X					
Incorrect input						
Incorrect update						
Premature termination of data						
Input/update not made						
Other (explain) _____						
(2) Flight Progress Strip						
Not updated		X				
Interpreted incorrectly						
Posted incorrectly						
Updated incorrectly						
Premature removal						
Other (explain) _____						
<b>B. Radar Display</b>						
(1) Misidentification	X					
Failure to reidentify aircraft when the accepted target identity becomes questionable						
Overlapping data blocks						
Acceptance of incomplete or difficult to correlate position information						
Other (explain) _____						
(2) Inappropriate Use of Displayed Data						
MODE C						
BRITE						
Conflict alert						
Failure to detect displayed data						
Failure to comprehend displayed data						
Failure to project future status of displayed data		X				
Other (explain) _____						
<b>C. Aircraft Observation (towers only)</b>						
(1) Actual Observation of Aircraft	X					
(2) Improper Use of Visual Data	X					
Landing						
Taking Off						
Ground Operation	X					
Taxing across runway						
Holding in position for takeoff						
Other (explain) _____						

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	No	A	B	C	D	E
<b>D. Communications Error</b>						
(1) Phraseology		X				
(2) Transposition						
(3) Misunderstanding						
(4) Readback						
Altitude						
Clearance						
Identification						
Other (explain) _____						
(5) Acknowledgment						
(6) Other (explain) <u>said heading 060 when meant 080</u>		X				
<b>E. Coordination</b>	X					
(1) Area of Incident	X					
Intra-sector/position						
Inter-sector/position						
Inter-facility						
Facility type _____, Level _____, Facility ID _____						
(2) Failure to utilize/comply with precoordination information						
(3) Improper use of information exchanged in coordination	X					
Aircraft Identification						
Altitude/Flight level						
Route of flight						
Speeds						
APREQS						
Special instructions						
Other (explain) _____						
(4) Failure to coordinate between ground and local control	X					
Crossing active runway						
Vehicle, equipment, or personnel on active runway						
Use of other than active runway for arrivals and departures						
Runway closure						
Other (explain) _____						
<b>F. Position Relief Briefing</b>	X					
(1) Employee did not use position relief checklist						
(2) Employee being relieved gave incomplete briefing						
(3) Relieving employee did not make use of pertinent data exchanged at briefing						
(4) Other (explain) _____						

## Final Operational Error/Deviation Report

Report Number AAT-O-97-E-002**68. FACILITY MANAGER'S RECOMMENDATIONS AND CORRECTIVE ACTIONS**

A complete review of the circumstances of this event was conducted by this facility. The review included an investigation by both the employee's immediate supervisor and the Quality Assurance office. The Operations Manager and the Air Traffic Manager were briefed on this incident. The Quality Assurance investigation included a review of the flight progress strips, voice tape, NTAP data, and interviews with the employees involved.

After an in depth review of the facts and FAA Orders 7110.65 and 7210.3 requirements, a training and recertification program addressing the specific needs of the employee was developed by her Operations Supervisor. The employee was decertified and provided the following:

Review with her OS of the performance deficiencies noted in the investigation: Failure to maintain awareness of traffic situation  
Failure to use appropriate strip marking and phraseology, Failure to maintain required separation through vectoring technique.

Successful completion of the following remedial training program has been accomplished:

- 1) A complete review of the Operational Error and performance deficiencies with immediate OS
- 2) A review of the appropriate sections in FAA Order 7110.65F relating to the deficiencies noted.
- 3) Completion of the following CBIs:
 

a) RADAR Separation Part I and II	b) RADAR vectoring
c) RADAR vectoring Simulation	d) Lateral Separation
- 4) 4 hours of DYSIM training

A successful recertification at Sector 101 was administered by the employee's OS during a period of moderate or greater traffic complexity. The employee has returned to full operational duty.

The employee and NATCA have been furnished with copies of this report and have offered no comment.

Upon receipt of the concurrence of the Air Traffic Manager with the IIC's findings, an Alert Bulletin was distributed to the controller work force describing the event and ways to avoid a recurrence.

Date	Typed/Printed Name of Facility Manager	Signature
01/10/1997 MM-DD-YYYY	William Johnson First/Last Name	/s/ Facility Manager

**69. AIR TRAFFIC DIVISION MANAGER'S CONCLUSIONS / RECOMMENDATIONS**

We concur with the recommendations and corrective actions of the facility manager.

Date

Typed/Printed Name of Division Manager

Signature

02/14/1997

Harley Davisson

/s/

MM-DD-YYYY

First/Last Name

Division Manager

# Appendix 5. Example Of FAA Form 7210-5, Operational Error/Deviation Reclassification Report

U/I SH

National Stock No. 0052-00-879-2001

## OPERATIONAL ERROR/DEVIATION RECLASSIFICATION REPORT (RIS: AT 7210-3)

1. REPORT NUMBER <u>AAT-C-97-D-004</u>	
2. OCCURRENCE RECLASSIFIED:  TO: <input type="checkbox"/> MILITARY FACILITY DEVIATION <input type="checkbox"/> PILOT DEVIATION <input checked="" type="checkbox"/> NO OCCURRENCE	
3. DATE OF OCCURRENCE <u>07 28 97</u> MO DAY YR	
4. TIME OF OCCURRENCE <u>18 36</u> (GMT)	
5. NAME/TITLE OF PERSON REPORTING RECLASSIFICATION <u>William Johnson, Air Traffic Manager</u>	
6. DATE OF RECLASSIFICATION <u>08 14 97</u> MO DAY YR	
7. TYPED OR PRINTED NAME AIR TRAFFIC DIVISION CHIEF <u>Harley Davisson</u>	8. SIGNATURE <u>Harley Davisson</u>

FAA Form 7210-5 (7-81)

### Instructional Guide

#### GENERAL INFORMATION

After a preliminary Investigation Report, FAA Form 7210-2, has been completed and telephone notification to FAA Washington Headquarters has been accomplished, a review of the data by a reporting facility official (e.g., the Facility Chief) may result in a reclassification of an operational error or deviation to one of the following:

- Pilot deviation
- Military facility deviation
- No occurrence

The Operational Error Deviation Reclassification Report, FAA Form 7210-5, provides a means of reporting such a reclassification without the Investigator-in-Charge (IIC) completing the Final Operation Error Deviation Report.

The Regional Air Traffic Division Chief must concur with the reclassification.

If a reclassification as described above is made, the Air Traffic Division shall complete FAA Form 7210-5 and forward it to AAT-20 within 5 days of that determination.

This form shall not be used for a reclassification from an operational error to an operational deviation, or from an operational deviation to an operational error. For these types of reclassification Part II of FAA Form 7210-3 must be completed.

#### 1. REPORT NUMBER.

Enter the report number of the Preliminary Operational Error Deviation Report.

#### 2. OCCURRENCE RECLASSIFIED

TO: Place an "X" in the appropriate box that represents the new classification.

#### 3. DATE OF OCCURRENCE

Enter the date (month-day-year) of the error or deviation occurrence.

#### 4. TIME OF OCCURRENCE (GMT)

Using the 24 hour clock enter the time of the occurrence.

#### 5. NAME AND TITLE OF PERSON REPORTING THE RECLASSIFICATION

Enter the name of the person, at the facility, who reclassified the occurrence.

#### 6. DATE OF RECLASSIFICATION

Enter the date (month-day-year) of the reclassification. (Based on GMT)

#### 7. TYPED OR PRINTED NAME OF AIR TRAFFIC DIVISION CHIEF

Enter the typed or printed name of the Air Traffic Division Chief or authorized representative.

#### 8. SIGNATURE

Self explanatory.

## Appendix 6. Instructions For FAA Form 7230-6, Flight Assist Report

### INSTRUCTIONS

This form will facilitate analysis and correlation of the significant factors that can individually or in combination result in a pilot requiring assistance from an FAA air traffic control or flight service facility. Complete this form for each incident in which inflight assistance is provided to the pilot of an aircraft in a potentially dangerous situation. To ensure uniformity of information, follow the instructions below.

The word **Outstanding** should be entered at the top center of the form for all Outstanding Flight Assists.

**REGION:** Use three letter regional identifier (AAL, ACE, AEA, AGL, ANE, ANM, ASO, ASW and AWP).

**FLIGHT ASSIST REPORT NO.:** Assign number using three digits: start with 001 at beginning of each calendar year.

### ITEM

1. Use FAA three letter identifier.
2. Use six digits to specify date of assist, such as 010191 for January 1, 1991.
3. Supply UTC at which initial contact was made with aircraft requiring inflight assistance. Use four digits.
4. Use aircraft registration number.
5. Self-explanatory.
6. Self-explanatory.
7. Self-explanatory.
8. Indicate type of facility making report.
9. Indicate whether flight assist incident occurred during daylight or darkness.
10. Indicate if an Incident Report, FAA Form 8020-11 was filed.
11. Place "X" in box that describes the aircraft involved in the flight assist. Use FAA designator for the type of aircraft in last box.
12. Self-explanatory.
13. Indicate actual flight conditions in the vicinity at the time the aircraft made its initial call.
14. Indicate primary cause that triggered the flight incident. If "X" is placed in the equipment malfunction or other box, explain as necessary in Item 16. Only mark "Other" when the primary cause for the flight assist is not indicated elsewhere in Item 14.
15. Self-explanatory.
16. Give brief narrative summary of the incident. Include the results such as damage to the aircraft and whether other aircraft were delayed; further explanation of Items 13 and 14 if appropriate; and any other significant factors, comments or recommendations.
- 16a. The pilot's name and address should be included if known or if obtainable from the pilot. Use additional sheets if more space is required.
17. Indicate the employee/s primarily responsible for the flight assist with an astrisk (\*).

# Appendix 7. Example Of FAA Form 7230-6, Flight Assist Report

OUTSTANDING

RIS: 7230-11

FLIGHT ASSIST REPORT							REGION AZZ
							FLIGHT ASSIST REPORT NO. 001
1. Facility XYZ	2. Date 021197	3. Time (UTC) 2157	4. Aircraft Identification N1234	5. Number of Persons on Board 2	6. Point of Departure ZYY	7. Original Destination ABC	
8. Facility Type <input type="checkbox"/> AFSS <input checked="" type="checkbox"/> TERMINAL <input type="checkbox"/> FSS <input type="checkbox"/> CENTER			9. Occurred During Hours Of <input checked="" type="checkbox"/> Daylight <input type="checkbox"/> Darkness		10. Incident Report, FAA Form 8020-11, Filed <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
11. Aircraft Description C152						12. Flight Plan	
Category <input checked="" type="checkbox"/> General Aviation <input type="checkbox"/> Military <input type="checkbox"/> Air Carrier		Type <input type="checkbox"/> Piston <input type="checkbox"/> Turbine		No. of Engines <input checked="" type="checkbox"/> One <input type="checkbox"/> Two <input type="checkbox"/> Three or More		Designation (Specify) C152	
13. Actual Flight Conditions <input type="checkbox"/> VFR <input type="checkbox"/> IFR <input checked="" type="checkbox"/> VFR OTP <input type="checkbox"/> Unknown		14. Primary Cause <input type="checkbox"/> Lost <input type="checkbox"/> Low Fuel <input checked="" type="checkbox"/> Caught On Top		Equipment Malfunction <input type="checkbox"/> Comm. <input type="checkbox"/> Nav. <input type="checkbox"/> Mech.		Other (Specify) _____ _____	
15. Primary Method of Assistance <input checked="" type="checkbox"/> Radar <input type="checkbox"/> VOR <input type="checkbox"/> Other Aircraft <input type="checkbox"/> DF <input type="checkbox"/> ADF <input type="checkbox"/> Geographical Features <input type="checkbox"/> Specialist Detected and Advised Pilot							
16. Brief Summary of Incident N1234 was VFR en route to ABC airport. The pilot had expected VMC en route and at the destination. The pilot reported on top of an overcast layer of clouds unable to descend in VFR conditions. The approach controller, an instrument rated pilot and certified flight instructor, understood the predicament and evaluated the situation: VFR pilot with 1:20 of fuel remaining and a very questionable weather outlook. The ATCS requested weather information from 3 other adjoining facilities in an effort to find an airport reporting suitable weather and also requested weather conditions from 6 other pilots who were airborne in the surrounding area. The efforts proved fruitless; there were no airports without a solid overcast within the range capabilities of N1234. The ATCS told the pilot of his own pilot experience and instructor qualifications. The pilot agreed to attempt a straight-in instrument approach to ABC airport with the ATCS' coaching. The ATCS reviewed the cockpit instrumentation with the pilot and provided the "game plan" information that was understood and agreed upon by the pilot. While issuing radar vectors to establish the aircraft on a 10 mile final, he helped the pilot scan the instruments by reading out each instrument. The ATCS asked the preceding aircraft on the same approach to report the tops and bases of the cloud layer. The reports indicated that the pilot would have to descend through 1,100 ft. of IFR conditions and the pilot was briefed accordingly. Once the aircraft was established on an 8 mile final, the ATCS helped the pilot establish a 500 fpm rate of descent. When the aircraft entered IMC, the ATCS continued to issue constant reassurance and instructions to keep the wings level, reconfirm the directional gyro heading, artificial horizon configuration and also kept the pilot informed of his progress. On 5 mile final, the pilot was able to continue approach visually and land safely.							
16a. Pilot's Name Cecil Barnesworth			16b. Pilot's Address 111 12th St. Haywood, PN			16c. Pilot's Certificate Number Unknown	
17. ATC Specialist Who Provided Flight Assistance Service							
Name		Position Worked			Title and Grade		
Guy Lucci		ARE			FG-2152-12		
Signature (Facility Manager) 		Copy Distribution ATX-430; AZZ-500; FSD0-45					

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## Appendix 8. Interview Statement

The information given by you will become part of the records in the Privacy Act System, OPM/GOV'T-1.

The FAA's authority to obtain the information is contained in 49 U.S.C. Section 1344, 49 U.S.C. Section 1348, and 5 U.S.C. Section 301. Providing of this information is mandatory. The principal use of the information provided is to

determine trend/causes and recommend ATC system improvement. Information provided will be disclosed as a routine use in accord with the system description of OPM/GOV'T-1. Under this authority, disclosures may be made to union representatives and to the NTSB. Failure to provide the information requested will result in disciplinary action under FAA regulations.